FIRE RESCUE

Integrated fire, rescue, EMS and incident command technology

Volume 2 No 9

Holding the line between fire and fynbos



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Comment

We are proud to present our 21st edition of Fire and Rescue International (FRI). This issue features an interesting mix of local and international news, practical technical advice and the recentlyheld Fire Service Indaba. We profile a fire service and its chief fire officer, a training centre and an emergency medical service supplier. We also preview the South African summer fire season and continue with our exclusive series on wildfire investigations. Enjoy reading this edition of FRI and share it with your colleagues!



Lee Raath-Brownie

Cover profile

Volunteer Wildfire Services (VWS) features on our front cover this month and we profile this well-organised volunteer programme after our visit to its annual open day held at Newlands Forest in Cape Town, South Africa.

FRI Images photographic competition

Our winning photograph this month features the damping of a destructive fire at a hardware store in the Eastern Cape, South Africa. See page 3 for details. CONGRATULATIONS!

Submit your high-resolution photograph featuring a rescue, emergency, incident or fire scene and win R2 000 cash!

News section

The shopping mall collapse in Tongaat, South Africa, leads the news section followed by statistical overview of the South African road fatalities and water rescue incidents over the festive season. We introduce a new range of fire fighting nozzles from Dosetech and review the US polar vortex, Soweto mine fire and rescue, floods in Ireland, Cape Town, Italy and Brazil as well as the Australian heat wave, a Canadian train accident, Indonesia's forest fire challenges and a US Air Force helicopter crash in the UK. We report on Obamacare, the 9/11 fraudulent claims, several volcanic eruptions and the devastating fire that razed an ancient Tibetan town in China.

Western Cape fire season

FRI attended the launch of the Western Cape fire season in Stellenbosch, South Africa. We also feature the awareness campaign launched by the Western Cape Disaster Management Centre.

Fire Service Indaba

FRI review the recently-held Fire Service Indaba in Cape Town and Durban, that respectively overview industry's viewpoint on fire safety and training.

Machinery extrication

Colin Deiner discusses machinery extrication, preplanning for these challenging callouts, equipment needs and challenges. Deiner describes the possible scenarios of the rescue operation and details considerations for the incident commander.

Fire service

We profile Msukaligwa Fire and Rescue Service in Ermelo, South Africa and review its history, risk profile, staff, area of expertise, historic incidents, operational footprint and future plans. FRI also interviewed chief fire officer, Jaco Johnstone, a first generation fire fighter and outlines his career path, challenges, management approach, values and mentors.

Wildfire investigation

In the third part of Rob Erasmus of Enviro Wildfire Services' series of articles on wildfire investigation, he details what can be done should you suspect the occurrence of illegal wildfires in your area.

Training centre profiled

ATA International, specialising in occupational health and safety programmes, provides specialised training for professionals across the Africa continent.

Emergency medical services

We feature Helivac Medical Services, its history and service offering.

Fire protection association

The Unvoti Fire Protection Association is based in KwaZulu-Natal, South Africa and we profile its area of operations, challenges, resources and risk profile.

We are proud to serve those who serve and extend a vote of thanks to our readers, advertisers and contributors for their valued support. Fire and Rescue International is your magazine. Read it, use it and share it!



Lee Raath-Brownie Publisher



This month's FRI images winner!

Congratulations to

John M Costello for his "A hardware burning"

photo taken with a Canon Power shot G12,

with an ISO of 126 and a shutter speed of 1/320 sec with a 3.2 f-stop.

Well done!

Photo description:

The image is of firemen damping the last of the fire that destroyed a hardware store situated on the banks of the Umzimvubu River at the entrance to the town of Port St Johns in the Eastern Cape. Date of image is November 2011.

John Costello wins this month's prize money of R 2 000!

Submit your rescue, fire or EMS photo and win R2 000!

Fire and Rescue International (FRI) has introduced a monthly photographic competition to all its readers. This exciting competition offers you the opportunity of submitting your digital images of fires, fire fighters, disasters, emergencies and rescues.

The rules are simple:

- All photographs submitted must be in jpeg format and not bigger than 4 megabytes.
- Photographs must be in high resolution (minimum 1500 pixels on the longest edge @ 300dpi) for publishing purposes
- Allowed: cropping, curves, levels, colour saturation, contrast, brightness, sharpening but the faithful representation of a natural form, behaviour or phenomenon must be maintained.
- Not allowed: cloning, merging/photo stitching, layering of two photos into one final frame, special effects digital filters.
- Fire and Rescue International (FRI) reserves the right to publish (printed or digitally) submitted photographs with acknowledgement to the photographer.
- Winners will be chosen on the merit of their photograph.

- The judge's decision is final and no correspondence will be entered into afterwards.
- Brief description should accompany photo.

Entries must include:

Name of photographer Contact details (not for publishing) Email: (not for publishing) Name of photograph Brief description of photograph including type of fire Camera, lens and settings used

>>ENTER NOW!

All entries must be emailed to: **lee@fireandrescue.co.za**.

Volunteer Wildfire Services holds open day



Neville Cockrell, Clive Peters, both ex City of Cape Town Fire and Rescue; Philip Prins, SANParks; Ian Schnetler, CFO, City of Cape Town Fire and Rescue; Brian Summersgill, ex City of Cape Town Fire and Rescue and Donald Sparks, past CFO of City of Cape Town Fire and Rescue enjoying the day



Clinton Dilgee of Table Mountain National Park



VWS Newlands station commander, Richards Stubbs

Volunteer Wildfire Services teams at the open day

CA 362-209

ape Town-based Volunteer Wildfire Services (VWS) held its open day towards the end of 2013. The event took place at VWS' Newlands Fire Base situated at Newlands Forest in Cape Town, South Africa.

The day included various fire fighting displays, which included the City of Cape Town Fire and Rescue Service, amongst others. There were helicopter displays, rides on an old fire engine, best dressed fire kid competition, snake shows, various interactive events for the children creating fire awareness and the infamous foam party.

Clinton Dilgee of Table Mountain National Park welcomed all and thanked the volunteers for the efforts after which Richards Stubbs, VWS Newlands station commander thanked the various people involved in the setting up, running and maintenance of VWS including Paddy Gordon, Philip Prins, Pierre Gallagher, Tony Marshall, Pieter Viljoen, City of Cape Town Fire and Rescue Services and the disaster management centre, amongst others.

The Volunteer Wildfire Services (VWS) has been combating wildfires since being baptised through the devastating fires in 1999/2000 in Cape Town.

With approximately 180 members at three stations namely Newlands, Jonkershoek and South Peninsula, VWS is now a highly organised Section 21 Company that is gaining momentum on an annual basis. VWS has assisted the Table Mountain National Park and CapeNature as a first responder with some of the worst wildfires Cape Town has experienced.

Cover profile



City of Cape Town Fire and Rescue Service



Fun for the whole family



The new recruits getting an induction spray courtesy of the Huey



Western Cape Metro EMS



VWS team members



Children enjoying ride on the old fire engine



SafeQuip's team



Working on Fire Mamre team



Russel Meaker of Silky Saws and Daren Harvett of Multi Power Imports



Impressive aerial display awed visitors

▶ Working closely with other emergency service organisations in wildfire management such as Table Mountain National Park, CapeNature, Cape Town Fire and Rescue Service, Disaster Management, Winelands Fire Brigade, Stellenbosch Fire Brigade and Working on Fire has meant that the VWS has, to date, achieved over 39 000 active fire fighting hours between its members and stations.

VWS has three primary functions:

- Wildfire suppression services
- Education and awareness programmes
- Wildfire suppression and management training

Prescribed burning, education programmes and projects at schools and community projects form part of its service offering.

They respond to fires all year round through volunteers most of whom have day jobs; while some are students, others run their own companies. They are dedicated, motivated and highly-trained to ensure that VWS' ultimate goal of wildfire suppression is taken care of.

Departments

There are various departments within the Volunteer Wildfire Services that operate dependently to ensure the smooth running of the unit. These departments include:

- Fire fighters
- Drivers
- Control room
- Planning and mobile command
- Logistics and catering
- Technical and mechanical services
- Administration and member services
- Funding

As a completely non-profit organisation, VWS remains operational by receiving funding from a few small corporate sponsors and organisational partners (Table Mountain National Park and CapeNature) as well as individual donors. This enables VWS to remain operational. Visit their website to help support their cause.



ne of the largest building collapses in recent years in South Africa was the Tongaat shopping centre collapse, north of Durban, KwaZulu-Natal (KZN), on 19 November 2013.

News

The three storey shopping mall was still under construction when it had suffered a catastrophic failure at its central section. Netcare 911 spokesman, Chris Botha, said a concrete slab the size of a soccer field collapsed at the mall. The call was received by eThekwini Metro emergency mobilising and communications centre, reporting that it had collapsed and that people were injured and trapped.

The incident necessitated a multiagency response that included eThekwini Fire and Emergency Services, South African Police Services, Metropolitan Police, various private emergency medical services, National Sea Rescue Institute (NSRI), KwaDukuza Fire and Emergency Services and Rescue Tech amongst others. Emergency services made use of sniffer dogs to locate trapped victims. Several urban search and rescue (USAR) teams offered assistance including various local and provincial offices in Gauteng and the Western Cape. All calls were routed via eThekwini Disaster Management Centre and the KZN Provincial Disaster Management Centre (PDMC).

Two people perished in the collapse while 29 others were injured.

One patient was airlifted to the Albert Luthuli Central Hospital with head



Sniffer dogs were used in the rescue operations

and facial injuries, fractured skull and pelvis, internal bleeding and massive soft tissue damage. There were three red code patients and a further 25 green/yellow code patients that were transported to various hospitals. Construction at a shopping mall should not have taken place, eThekwini deputy mayor Nomvuzo Shabalala said. "We took them (the contractors) to court a month ago. We thought they had stopped," she told reporters on the scene. The reason the municipality took the contractors to court was because "they hadn't followed processes".

Rescue operations

Rescue efforts included acoustic sensing devices, tap-and-listen methods and sniffer dogs. Rescue operations were made difficult with trains passing, increasing the risk of further collapse of the already compromised structure though the vibrations. Crowd management also hampered efforts. There was also no formal person count available to assist rescue teams.

Structural engineers were contacted to provide insight on the structural stability and condition of the operational scene resulting in the certain areas declared as a high risk zone.

Once all rescue efforts were seized, the incident was handed over to the Department of Labour. ▲



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South Africa has been rated as the worst out of 36 countries in a road safety report released by the International Transport Forum in 2013, on the basis of the excessive fatalities on roads annually.

Over the holiday period for the period 1 December to 12 January 2013, preliminary reports from the Department of Transport reveal that 1 537 people lost their lives across the country.

However, the road fatality statistics announcement by the Transport Department has been met with criticism by some in the transport fraternity that allege the figure provided by Transport Minister, Dipuo Peters, was not credible.

Driving skills specialist and road analyst, Rob Handfield-Jones, who has monitored Christmas and Easter death tolls since 2007, says that the 39,5 deaths recorded per day over the end-of-year festive season in 2013/2014, exceeded the record figure of 38 for the previous holiday season. There were 840 road blocks and 3 800 arrests for traffic infringements in December and early January, but this clearly did not have an impact on the alarming fatality rate, when compared to last year.

Handfield-Jones stated that the festive period for 2013/2014 ended on 13 January and he expected the death toll to stand at 1736, based on past and current trends.

He said the main reason for the everincreasing festive death toll was the failure of Government to provide road safety leadership. "People only drive as badly as their Governments allow them to."

Dipuo Peters has said that the Transport Department will develop a 'reliable statistical databank' for road-related safety incidents, as part of the Government's effort to better manage road safety and to meet its stated target of halving road fatalities by 2020.

Varying reports have been collated from the different provinces in the country, which shows that the Western Cape has curbed its road fatality rates.

The Western Cape Government reports that 'passenger' deaths were down 50 percent over December, when compared to 2012 and this is owing to dedicated efforts of traffic officials over the festive season.

"These are terrific results following the launch of Safely Home's 'It takes a second to save a life' campaign on seatbelts use," stated the Western Cape Government's Safely Home webpage.

A total of 124 lives were lost on the Province's roads for the period 1 December to 29 December 2013, at a rate of 4 per day, compared to 149 deaths recorded in 2012 (5 deaths per day) for the same period.

A report by road safety awareness organisation, Arrive Alive, showed that KwaZulu-Natal (KZN) Province recorded the most fatalities of any province in South Africa, with 212 deaths recorded over the December **•** The Bushfire Cooperative Research Centre conducted research into NSW bushfires in 2013

Lessons to be learned from devastating bushfires in Australia

series of bushfires in Australia across the state of New South Waves (NSW) in October last year, causing upwards of \$100 million in damages and destroying more than 200 homes in the region.

As a result, Australia's Bushfire Cooperative Research Centre (CRC) and the Bushfire and Natural Hazards CRC have been engaged by the New South Wales Rural Fire Service to conduct independent community research into the October 2013 bushfires.

In December last year, Bushfire CRC reported that research had

commenced at three locations affected by the recent bushfires namely the harbour region of Port Stephens, Blue Mountains and the Southern Highlands, which were most affected by the bushfires in October.

Researchers were conducting faceto-face interviews with people in these communities, to assist with compiling a report for the NSW Rural Fire Service into community preparedness and response and to assist with improvements to bushfire safety initiatives.

The fires in NSW in October last year, were reported as being the worst in

the state since the 1960s, with two fatalities attributed to the fires and with estimated claims expected to exceed \$94 million.

In the week leading up to the bushfires, temperatures in the Blue Mountains peaked at 34,6 degrees Celsius, with peak windspeed measuring at 46 kilometres per hour from the northwest during this time.

The Premier of NSW, Barry O'Farrell, declared a state of emergency on 20 October, empowering fire fighters to evict residents and demolish fireaffected buildings.▲

Provinces	GA	KZ	WC	EC	FS	MP	NW	LI	NC	RSA
01-31 Dec13	203	212	84	141	91	105	70	102	33	1 041
01-12 Jan 14	49	44	29	33	20	23	10	24	8	240
Total crashes	252	256	113	174	111	128	80	126	41	1 281
Fatalities	302	307	136	209	133	154	96	151	49	1 537

Breakdown of fatal crashes Per Province

period and 44 fatalities for the period
1 January to 14 January.

Gauteng and Limpopo Province followed KZN, with 252 and 126 fatalities recorded over the end-ofyear season, respectively.

Total motor vehicle crashes numbered 1 281 and the total number of fatalities across the country for the festive season was 1 537, according to the Arrive Alive preliminary report.

Arrive Alive noted that the road fatality contributory factors were

dangerous overtaking, excessive speed, as well as 'drinking and driving' and 'drinking and walking'.

The International Transport Forum's (ITF) latest Road Safety Annual Report released in 2013, ranked South Africa as the worst out of 36 other countries, when it came to the number of road fatalities.

Road fatalities per 100 000 inhabitants was at 27,6 deaths in 2011, which is a shocking statistic when compared to developed countries like North America with 10,4 and Australia with 5,6, reported the ITF. The research noted that the motorised vehicle fleet in South Africa had doubled in the last 20 years and that between 1990 and 2011 the number of road fatalities increased by 25. The ITF report also estimated the economic cost of South Africa's road crashes to be R307-billion each year.

Although not a member of the ITF, South Africa joined the forum's International Traffic Safety Data and Analysis Group (IRTAD) in 2012 as an observer and is one of just a handful of developing countries included in the latest road safety report.



Most dangerous temperatures in decades swept through the US

deep freeze spread across much of the US in the first week of January, with temperatures dropping to minus 30 degrees Celsius in the Midwest region of the country.

US media reported that nearly half the nation, approximately 140 million people, would bear the brunt of the polar vortex, also known as a polar cyclone, located near either of a planet's geographical poles.

The arctic blasts was expected to sweep through the tropical regions

in the southern parts of the country, including the subtropical state of Alabama, where the temperatures were expect to plunge into the single digits.

The freezing air spread from the Midwest to the East and the Deep South of the nation, shattering records that in some cases had stood for more than a century.

In a phenomenon that forecasters said was not all too unusual, all 50 states saw freezing temperatures at some point on 7 January this year. This included Hawaii, where it was minus seven degrees Celsius atop Mauna Kea, a dormant volcano.

Many schools and day care centres across the eastern half of the US closed to protect youngsters from the dangerous cold, while officials opened shelters for the homeless and anyone else that needed a warm place.

Emergency workers in Atlanta drove the homeless to shelters or hospitals.

Some of the greatest concern surrounds the tens of thousands of \blacktriangleright





Approximately half the US population were faced brutal winter temperatures in January

Harmony Gold suspended all its operations in SA after 10 miners were killed in three separate incidences in February

Earthquake and subsequent fire at mine near Soweto claims eight lives

fire at the Harmony Gold Mining Company's (Harmony) Doornkop shaft near Soweto, South Africa, on 4 February this year, resulted in the death of eight miners.

The fire, which trapped nine other miners who managed to flee to a refuge bay, was triggered after an earthquake damaged electric cables at Harmony's underground operation in Doornkop.

Rescue teams had to battle through smoke and debris at a depth of 1 700 metres to reach the eight miners trapped in the refuge bay, which was equipped with a telephone and other survival items.

"Rescue teams were immediately dispatched underground, but access to the affected area was hampered by smoke and a subsequent fall of ground," said Harmony spokesperson, James Duncan.

Eight of the nine trapped miners were rescued in the hours following

Midwesterners without electricity. More than 15 000 customers in Indiana, 6 800 in Illinois and 2 200 in Missouri didn't have power overnight during the coldest period of the chill on 6 January, according to utility companies.

The bitter cold weather claimed at least 13 lives in the first week of January, reported a US national news service. It is believed that at least 20 people the incident, with one miner being unaccounted for.

Harmony Gold CEO, Graham Briggs, said there was a delay in bringing up the deceased miners' bodies, because 'the rescue team is compelled to collect evidence that will be used during investigations'.

Briggs said the fire caused further rock falls below ground. He said the mining industry would have a bleak future unless it recommitted itself to improving the safety of workers.

The death of the eight miners is seen as South Africa's worst mining accident in five years.

Harmony Gold chairman, Patrice Motsepe, said the deaths had caused his heart to bleed as he addressed workers at the site.

"We were confident that they were going to come out alive," said Motsepe. "The safety bays were meant to deal with these eventualities. Our hearts are bleeding

died as a result of the record cold temperatures across the US in early January.

Eleven people died in road accidents and a man in Wisconsin died of hypothermia. In Byron, New York, a 71-year-old woman with Alzheimer's disease wandered away from her home Thursday night and was found dead in the snow in a wooded area about 100 yards away. blood. Our people's lives are more important than money."

Mineral resources minister, Susan Shabangu, says the death of the miners was regrettable and that the cause of the fire would be investigated.

Five of the workers came from the Eastern Cape, one from Mozambique, one from Lesotho, one from Swaziland and the other from Mpumalanga.

Meanwhile, two more miners were killed in Harmony Gold's mining operations in two separate incidents on 6 February this year.

The miners were killed at Harmony's Kusasalethu and Joel mines, resulting in the suspension of all Harmony's mines in the country, of which there are thirteen.

"The past two days have been tragic for Harmony, having lost our colleagues at three of our operations in three separate events," said Briggs.

"This is unacceptable," he added. 🔺

In Chicago, a plane headed to Las Vegas slid off the taxiway at O'Hare International Airport. None of the customers on Spirit Flight 245 were injured, said director of corporate communications for Spirit, Misty Pinson.

Chicago opened up 12 centres for residents to seek warmth. Libraries and some other city facilities would also be open, said Department of Family and Support Services, Evelyn Diaz.▲ NSRI Bakoven volunteers assist three sea divers in difficulty off Cosy Bay on the Atlantic Sea Board

Rip currents responsible for numerous deaths at the beach





he National Sea Rescue Institute (NSRI) reports that it responded to 99 emergencies over the festive season beginning 1 December until 14 January 2014.

During this period, NSRI volunteer crews rescued 197 people, including 11 children, says NSRI marketing manager, Andrew Ingram.

The busiest day for the volunteer crews working with the NSRI was on New Year's Day, 1 January 2014, when 11 of the rescue bases were activated across the country's coastline.

"Tragically 31 adults and 11 children lost their lives," reports Ingram. "Thirteen of these deaths were in rip currents and 8 of the 13 to drown in these rip currents were adults."

NSRI undertook an awareness drive to educate bathers and holidaymakers at the coast about rip currents at the start of the holiday season in December last year.

Ingram says that a number of the tragic incidents that occurred over the holiday season could have been avoided. "Rip currents are just not as dangerous for people who can recognise them, know how they work, how to avoid the danger and who to call in an emergency," he explains.

A Harvest Lindiwe fisherman assisted by NSRI Station 6 in Port Elizabeth

Port Elizabeth's WaterWise Academy instructor, Marcus Oshry, says that panicking is often the cause of drowning. "If you remain calm and don't panic, you can successfully get out of a rip current."

Oshry is a swimming instructor and educator in the Waterwise programme, which is run in conjunction with an initiative by SwimSA, the governing body of aquatics in South Africa and which teaches children how to swim safely and coping with waves at the beach.

In a report by the NSRI on rip currents, Oshry says that bathers should think of the current as a river and you need to ►



Wing of aircraft crashes through building at OR Tambo

our airport staff members were injured when a British Airways (BA) plane hit a building at OR Tambo International Airport in Kempton Park, South Africa, just before takeoff on 22 December last year.

The British Airways Boeing 747-400 heading for Heathrow Airport in London, England had 180 passengers on board. However, no one was injured on board the plane.

The crash at OR Tambo was as a result of a taxiing mistake by the onboard crew, according to the South African Civil Aviation Authority (SACAA).

Air traffic control instructed the crew of the BA plane to use another taxi path, different from the one they were on, said SACAA spokeswoman, Phindiwe Gwebu.

"The crew continued onto taxi way M, which is narrower, resulting in the aircraft impacting on an office building behind the SAA technical hangars," said Gwebu.



Airports Company South Africa (ACSA) said that the four staff members sustained minor injuries when they were hit by debris after the aircraft's wing struck the building.

ACSA spokesperson, Unathi Batyashe-Fillis, said the building and one of the aircraft's wings were damaged in the crash.

"The aircraft has since been moved to a remote location and operations have not been disrupted," she said, adding that the accident was being investigated by the South African Civil Aviation Authority.

There was fuel spillage following the crash, which was cleaned up by OR Tambo airport's fire services.

None of the 180 passengers on board the aircraft, headed for Heathrow Airport, were injured. The passengers affected were accommodated overnight at an airport hotel.

swim to the side of the river to get out of the current. "You can use the waves to get you back to the shore," he says.

Apart from the rip currents, Ingram says that two major causes of serious injury and death over the holiday period were down to people not wearing lifejackets. "It is often impossible to put a lifejacket on when you most need it," says Ingram.

He adds that skippers of pleasure boats not wearing kill switches, also known as an emergency stop, a safety mechanism used to shut off a device or engine, is another major cause of serious injury or death.

Ingram encourages motor boat operators to think about possible accidents that might occur in the ocean, such as the skipper being thrown out of a boat that is traveling at speed. He says that if a kill switch was not attached to the boat and if the skipper was not wearing a life jacket, this could result in tragic consequences and 'it could well be a complete disaster'. "In a relaxed holiday mood it is easy to go out in a boat and be slack about these two basic safety precautions,' says Ingram.



NSRI Hermanus assist a group that attended the christening of a baby girl

Credible data key

to Indonesia's efforts to solve forest fire challenges

Accurate information on wildfire causes is critical to Indonesia's emissions reduction targets

ccurate information on the causes of wildfires and the amount of carbon emissions they produce is critical if Indonesia is to meet its emissions reductions targets, according to experts at a side event at the UN climate change meetings in Warsaw, Poland in December last year.

Earlier this year, fires swept across parts of the Indonesian island of Sumatra, sending smoke billowing across the narrow Strait of Malacca and causing record-breaking air pollution levels in Singapore and Malaysia.

Centre for International Forestry Research (CIFOR) principal scientist, Daniel Murdiyarso, said that the international media attention that the event generated must be translated into funding for more detailed research and a commitment by the Indonesian government to address the issue.

"The haze occurred in the wrong time in the wrong place and so it got to the attention of media very quickly," said Murdiyarso. "If it had blown towards the Indian Ocean, the story would have been different."

When the environment ministers of Malaysia, Singapore, Thailand and Brunei met in July to discuss the fires, they urged Indonesia to do more to tackle them.

Data delivery

Murdiyarso says this is an opportunity for Indonesia to invest in the technologies that will enable the country to accurately measure 'activity data' and 'emissions factors' used to assess greenhouse gas emissions due to the conversion of forest to agricultural land.

"This is a long-overdue process. We need to inform the policy community with really credible data," said Murdiyarso. This would give Indonesia more information about the causes and consequences of fires, and enable the government to identify actions that can help it to meet its target of a 26 percent reduction in greenhouse gas emissions by 2020.

"Looking at the magnitude and causes of the carbon emissions from land-use change, this is a low-hanging fruit. On peatlands, one single fire can produce five to six times more carbon emissions than would be produced by clearing the same land area by other means."

"That means tackling the underlying causes of fire is something the Government can do relatively quickly, but have a big impact on emissions and transboundary pollution."

CIFOR research into the fires has indicated that nearly a quarter of the June fires burned in industrial oil palm and acacia plantations. Very few fires took place in natural forests. The research raised more questions than answers.

Complex causes

"The fire this year is very interesting, because it did not happen in an El Niño year," said Murdiyarso, referring to the weather phenomenon that usually causes dry conditions across much of Indonesia.

He said that people typically wait for a long dry spell to burn off the land. But 2013 was not particularly dry. "So there must be something else that drives them to burn. Maybe the market is very attractive to quickly plant agricultural crops, to quickly produce the commodity, to meet the demand of the market."

"People tend to think fires are accidental, driven by something biophysical, but often the market drives them. The socio-economic reality on the ground is much more complex than we thought." >

DoseTech introduces new Akron Avenger nozzles

oseTech, advertising as Dosetechfire, has introduced the well-known Akron Avenger range of nozzles to the South African fire protection market.

The patent-pending Avenger series of handline nozzles combine years of designing and manufacturing experience with superior performance and dependability. Available in selectable and fixed capacity, the Avenger offers great stream quality and a simple design.

"The Avenger nozzles are durable, reliable and affordable", says Michael Feldon, managing director of Dosetech.

The Avenger Styles 1616 and 1615, Avenger SG, is a selectable or constant capacity nozzle (flow remains the same in all patterns) with various flow settings for frontline flow control. Styles 4116 and 4115, Avenger FG, is a fixed or single capacity nozzle offering a variety of pressures with the simplicity of a fixed orifice.

The Akron nozzle range features:

- Lightweight fog and straight stream nozzle with multiple fixed or constant capacity settings
- Great stream performance
- Raised lug on the bumper for easier pattern identification
- Multiple pattern detents
- Integrated control ring does not require you to flush the nozzle without shutting down
- Quick change pattern adjustment (90 degrees of rotation from straight stream to full fog)
- Easy to operate with simplified nozzle training



The Akron Avenger FG fire hose nozzle

- NFPA compliant
- Meets European CE standard
- 5-year warranty

The Akron Avenger provides an allround solution in various applications including fire brigades, airport rescue and fire fighting (ARFF), industrial and structural as well as wildfire suppression.▲

► While Indonesia's neighbours did suffer the effects of the haze, the fires had a more severe impact locally, causing respiratory problems in youth and the elderly and affecting people's livelihoods.

Murdiyarso said that local governments also need to be more engaged in tackling the problem, not just by fighting the fires, but also preventing them through proper landuse planning. "I hope these locally relevant issues can be nicely linked to the global initiatives, so that the activities on the ground, at the local or national level, match with the global interest to reduce greenhouse gas emissions."

Indonesia's National Council on Climate Change (DNPI) secretary for Mitigation Working Group, Farhan Helmy, said the Indonesian Government is taking the fires seriously.

Since July, the DNPI has been working on a comprehensive report about the drivers and greenhouse gas emissions from the fires, stated Helmy.

The report will be released in the coming weeks. DNPI aims to share the report with Indonesian line ministries and other interested organisations and open a dialogue between scientists and policy makers on the topic.

"My worry is that we discuss the same thing next year, but without a resolution and all we do is wait for the rain to come. We would like to have more comprehensive solutions on this," Helmy said.

"We have to stop what is happening now. Enough is enough," implored Helmy. \blacktriangle



News

11

Cleanup and flood defence measures gof underway across Ireland following widespread flooding in January

Clean-up started in devastated flood-hit regions of Ireland

A national clean-up began on 3 February this year, following the devastating floods that hit Ireland in the first week of the New Year.

Millions of Euro worth of damage was done as high tides and gale force winds battered the west, south and south east coasts of Ireland in the communities of Dublin, Galway, Clare, Mayo, Cork, Donegal, Limerick and Kerry.

It is estimated that millions of euros worth of damage has been caused after seawalls and footpaths were broken by the sheer force of rushing seawater in January.

In February, county councils around the country were on high alert as staff

worked to make floodwaters retreat and prevent damage to businesses and homes, amid concerns that further flooding may occur in the coast regions of the country.

Ireland's Minister of State, Brian Hayes, visited Limerick a city in the province of Munster, to witness the damage cause by severe flooding in the city.

Hayes said a 'new defence scheme' would be implemented to upgrade the country's capacity to handle such incidents.

The council of Clare County in Munster Province committed to spending 50 000 Euros on a preliminary clean up in the village of Lahinch, after the small tourist community was battered badly by the storm.



Homes and businesses in Dublin city in the province of Leinster escaped damage when the River Liffery rose to the highest tide of record.

Meanwhile, businesses along the seafront in Clontarf, Dublin one of the worst-hit areas by the storm in the Irish capital, breathed a collective sigh of relief on 3 February, as rising flood waters stopped just metres from shop fronts.

There had been fears the high tide would cause serious flooding to the shops and homes, where the promenade walkway had flooded for the first time since 2004.

In preparation, a ring of sandbags was installed by Dublin City Council around the worst hit part of the promenade and sandbags had also been made available to homes and businesses.

A huge stretch of the promenade had been entirely flooded with the incoming tide filling gullies by high tide, resulting in partial flooding of the road. However, the flood waters soon receded, leaving premises unscathed.

Floods caused misery in county towns including Midleton, Youghal, Clonakilty, Cobh, Kinsale, Carrigaline, Bandon, Fermoy and Mallow.

In Limerick, council staff pumped water from affected areas and ►

News



Canadian National Railway (CN Rail) train carrying propane and crude oil derailed and caught fire in northwest New Brunswick, Canada in January this year. It is the latest in a string of train accidents that have put the surging crude-by-rail business under heavy scrutiny.

Fire officials say the cars appear to have been mostly empty except for some propane residue, said Plaster Rock emergency measures coordinator, Sharon DeWitt.

'They'll in all probability burn themselves out by morning,' said DeWitt. 'We'll monitor it.'

There have been five major accidents in the past year involving a train carrying crude oil. The most devastating occurred in Quebec in July last year, when a runaway train derailed and exploded in the heart of the town of Lac Megantic, killing 47.

deployed sandbags in advance of further bad weather tonight.

"This is a terrible situation that people are in. We have got to make sure the people of this area never ever have to go through this appalling situation," Minister Hayes said. "As an immediate solution we will be putting in place temporary measures over the course of the next few days to make sure some protection is given to the community just in case the high tides come again." No one was injured, but about 45 nearby homes were evacuated when the train derailed near the village of Plaster Rock in New Brunswick, according to local officials.

There was no danger to residents as the wind blew blowing away from Plaster Rock, a village of about 1 000 in a mainly wooded area about 50 kilometres from the US border.

About 150 people were affected in a two-kilometre radius of the derailment scene. Firemen and cleanup crews let the fire burn itself out before moving in as there was risk that something could explode. Plaster Rock fire chief, Tim Corbon, said that air and ground assessment of the area was expected to continue for two days after the incident.

CN Rail president and chief executive officer, Claude Mongeau, said in a new conference in Plaster Rock that 17 of the 122 cars on the trail derailed. CN spokesperson, Jim Feeny, said

In Belfast, Northern Ireland serious flooding was avoided, which many feared was certain to hit, after a tidal surge came and went without breaching defences.

A major multi-agency operation commenced on 2 February, preparing residential and industrial districts on both sides of the River Lagan that were identified as being at major risk.

However, defences held firm and there were no reports of any serious flooding more than two hours after crews removed tank and freight cars that were close to the liquid petroleum gas (LPG) fires and instigated a controlled burn on three LPG cars.

"That is the safest and most effective way to bring this to a conclusion quickly and safely," said Feeny, from the site of derailment.

New Brunswick Premier, David Alward, noted that there were no injuries as a result of the train derailment adding that it appeared that there was minimal impact on the environment, in a press conference.

However, the derailment and subsequent fire prompted the provincial Health Department in New Brunswick to issue an air quality alert for the Plaster Rock area and an advisory about water use.

Railways are not required to develop detailed emergency response plans for crude oil, according to a letter from the National Transportation Safety Board in the US, addressed to the Federal Railway Administration. As a result, 'the burden of responding to an accident and remediating the aftermath is still left with communities', stated the letter.

A series of disastrous derailments over the past year has reignited the push for tougher regulation. A surge in US oil production has drastically increased the number of oil trains moving across the continent as pipelines fail to keep up with growing supply.

Some US politicians have called for a phase-out or retrofit of old tankers that do not meet current safety standards and are prone to puncture.▲

the midday high tide.

Britain faced more misery as heavy downpours, huge tidal surges and strong gales were forecast for the month of February this year.

The warnings were issued by the Environment Agency across the Midlands and South West.

The UKs Health Protection Agency also warned parents not to let children play in contaminated flood water, because of rat plague fears.



eavy rainfall in the Western Cape resulted in flooding in many parts of the South African province in January 2014.

Western Cape Disaster Management reports that all the district municipalities were affected including the Central Karoo, Cape Winelands, Overberg, West Coast and Eden.

In a media release, the Western Cape Disaster Management Centre (WCDMC) stated that it was monitoring heavy rains experienced throughout the province due to a cut off low, which is a low pressure system associated with very strong atmospheric instability and power convection up drafts.

Widespread damage across the Western Cape was reported to road infrastructure, municipal infrastructure and agricultural land and crops.

This follows a weather warning for heavy rainfall issued by the South African Weather Services that was expected in the West Coast District and possible severe thunderstorms over the northern parts of the Cape Winelands on 8 February.

In the City of Cape Town, electricity outages were reported and occurred as a result of strong winds during this time.

Following its monitoring of the effects of rainfall in early January, the Western Cape Disaster Management (WCDM) reported that most dam levels and rivers subsided, causing no threat or risk to flooding. The Department of Water Affairs deployed officials across the province to monitor the flooded rivers as well as affected dams. A report from the WDMC noted that the Buffeljags dam was at 130,98 percent capacity, the Floriskraal dam at 150,44 percent and the Prins River dam at 129,62 percent.

Municipalities undertook mopping up operations and emergency repairs, while provincial and national departments provided support and assistance to normalise conditions across the province.

Three lives were lost in the Hoops River in Robertson and there were various road accidents in the Western Cape owing to bad weather conditions.

In Slangrivier, in the Eden District Municipality some houses were affected by the rain. Disaster relief in the form of blankets and food parcels were distributed by Hessequa Disaster Management.

Western Cape Disaster Management chief director, Colin Deiner, called on the National Disaster Management Centre (NDMC) to authorise the use of the South African National Defence Force (SANDF) Oryx helicopter.

The Oryx was deployed on 7 January to rescue persons from farms in the Gamkaskloof area downstream of the Floriskraal dam in the Swartberg area and to conduct a preliminary assessment.

According to the WDMC, municipal infrastructure damages in Laingsburg in the Western Cape include the sewerage plant and the water pipeline, which has already been repaired.

No health challenges resulted from this situation. Damage to roads includes the N1 of which the South African National Roads Agency Limited (Sanral) was alerted. Provincial road damages related mostly to gravel roads across the province.

In terms of the agricultural impact owing to heavy rains, the Central Karoo, Cape Winelands and Overberg were mainly affected.

Since the 1981 floods in Laingsburg, the community has become more resilient and more prepared to deal and mitigate the effects of heavy rainfall.

Following the 1981 floods, river protection works (groynes) were fitted in the Buffelsriver, which handled flood waters easily, providing protection to the river banks against high water flow in.

Western Cape Disaster Management assessed the region in the weeks following the heavy rainfall stating that it would continue to determine if a disaster declaration would be considered as it was too early to quantify on and during the period beginning 8 January this year.

"With the relevant flood plans activated in communities during this time, we were more prepared to deal with the effects of heavy rains, which has lessened the impact," said Deiner.

Record-setting heat wave in Australia

record-setting heat wave impacted much of Australia during the final week of 2013 and the first week of 2014, with last year being confirmed as the hottest year on record in Australia by the Australia Bureau of Meteorology.

While the heat wave did not persist for long periods as in past years, many areas recorded their hottest day on record.

The Bureau of Meteorology also reported that 34 locations in Australia set all-time high temperature records between 30 December and 4 January. Temperatures peaked at temperature 49,3 degrees Celsius on 2 January, 2013 in South Australia.

The heat increased across Western Australia late in December before moving into South Australia and eventually rose across parts of Queensland and New South Wales in early January.

The heat peaked across Queensland on 3 January, which became the hottest day on record in Queensland, according to the Australia Bureau of Meteorology.

Queensland, New South Wales and South Australia all saw temperatures rise above 47 degrees Celsius over the first three days of the New Year. The hottest temperature recorded over that stretch was in Moomba, South Australia on 2 January.

The Bureau of Meteorology has a few pockets on its forecast high temperature map shaded deep purple, a colour it famously added to its temperature maps during last year's January heat wave.

The heat wave also had deadly impacts on the wildlife of Queensland, as reports indicate that as many as 100 000 bats died from the heat.

Livestock farmers were forced to slaughter more cattle than usual and Australia's herds could be at their lowest level in four years, according to Australian media reports.

The Bureau of Meteorology noted that the heat wave did not affect as wide an area as in January 2013. However, the heat wave has been 'highly significant with substantial areas having their hottest day on record', according to a statement released by the Bureau of Meteorology.

The heat wave comes on the heels of Australia's hottest year on record, during which many records were shattered, including the hottest summer period in the country.

The Gunnedah Research Centre, located 426 kilometres northwest of Sydney, temperatures rose to 45 degrees



Many areas in Australia recorded its hottest day on record in January this year

Celsius. The station has records going back 76 years and is part of Australia's long-term climate network.

Overall, 34 locations across the country with 40 years or more of data had their hottest day on record.



Flooding in large parts of central Italy

Italian emergency workers conduct search and rescue duties in Italy's capital, Roma

orrential rain has caused severe flooding in several cities across Italy in late January this year, with areas in the central and the northern part of the country being worst affected.

Severe flooding around the Arno River has swamped the central Italian cities of Pisa and Florence on 31 January, with the capital city of Rome also being flooded.

According to officials in Pisa, the river reached levels unseen over the last 20 years. As a result, a team of emergency workers are erecting barriers and reinforcing banks to try to channel water into the sea.

For safety reasons, officials decided to block off streets leading to the Pisa citv centre.

In Florence, flood waters rose to dangerous levels as small towns were flooded and schools remained

closed as a precaution in late January this vear.

Heavy rain lashed the nation's capital, Rome, which experience significant traffic problems caused by fallen branches. In the northern part of the city a subway station was closed because of flooding.

In Tuscany, about 20 families in the Lucca area were forced to spend the night away from their homes.

The January floods left behind massive destruction in central Italy. In the town of Capena, a large crater was left after flooding resulted in a huge mudslide. Italian authorities were concerned that more heavy rain forecast for the month of February this year would bring further damage.

Many emergency workers had difficulty in carrying out their tasks because of the conditions. Residents did what they could to clean up.

Northern Italy

Heavy rains left homes floods forcing the evacuation of hundreds of people in Northern Italy in mid-January, according to emergency officials.

Italian authorities focused efforts on managing the raging Tiber River, situated north of Rome, which swelled to dangerous levels.

Widespread flooding was reported in Bologna and Genoa, with the city of Modena, particularly affected by the heavy rains.

The flooding in the region resulted in 600 people being forced from their homes, taking refuge in shelters, hotels and hospitals. Workers used large boulders to reinforce the banks of the nearby Secchia River. Flooding has closed local roads and bridges in the area.

Two people died while assisting others to escape the flooding in >



hit by heavy rains in January this year



Living in fire prone hills

seen as acceptable risk – Australian academic

ustralia suffered soaring temperatures during the current summer season with January 2014 being particularly hot at 40 degree Celsius and over.

The ever-present threat of bushfire 'hangs over those living in the hills', according to the director of the Director of the Appleton Institute CQUniversity Australia, Professor Drew Dawson.

Why do people continue to live in bushfire prone zones and ignore the apparently obvious risk? was the rhetoric from Professor Dawson in a public report.

"Why do people continually fail to heed the advice of the experts and clear the trees and reduce the fuel around their house?" he wrote.

"To a psychologist, it's not actually an irrational behaviour. If we think about it from a risk-based perspective, both the experts and the residents are making a rational decision. But from a different perspective."

Professor Dawson said that for the resident, the chances of their house being destroyed or dying in a fire is statistically very low.

He noted that nationally, less than a thousand people have died in bushfire-related incidents in the last 100 years. Nearly twice that number, die each year on the road, he said. "We drive every day, so clearly the risk is acceptable to many given the amenity associated with driving. Living in bushfire zones has a similar logic."

► northern Italy. One man in the Bastiglia area disappeared after falling out of his dinghy while helping others evacuate.

In the Dolomites, a mountain range northeast of Italy, the army was forced to intervene with snowploughs to deal with a record amount of snow in the Veneto region.

All mountain passes were closed after more than two metres of

Professor Dawson stated that for the fire services people, the perceived risk is very different. "For them the risk is ever present, palpable," he said. "Unlike the resident, they are responsible for very large areas of fire risk and the perceived probability of disaster is very high. When fire services experts look at a house nestled in a verdant glen of trees and shrubs, they see disaster where the resident sees amenity."

Professor Dawson added that the challenge is getting each to see the others point of view and to understand that each is 'rational' based on the criteria they hold dearest.

He said that a similar paradox emerges when we see the calls for increased fuel reduction burns following large fires. "The logic seems clear. Increase the frequency of fuel reduction burns, reduce available fuel and reduce the risk of bushfire. But increased fuel burns carry the potential to reduce air quality in our major cities and increase respiratoryrelated disease and death."

Recent research by the Bushfire Cooperative Research Centre has shown a similar paradox with overreliance on Bushfire Plans as a risk mitigation panacea.

A spokesman for the Cooperative Research Centre (CRC), said, research with communities after major fires suggests that 'people can panic and fail to execute their plans as intended, or the plan does not cover all of the possibilities. We need to ensure people have a plan B, C and D as well'.

snow fell. Train services to and from neighbouring Austria came to a halt.

In Genoa, in the Bogliasco commune, a doctor was swept away when he and a man whose son he had just treated became caught in a current from a river. The man, who was accompanying the doctor back to his home, was hospitalised after being rescued by a passerby.

At least three people died in the



Director of Appleton Institute at CQUniversity, Professor Drew Dawson

Professor Dawson added that understanding community risk perception and developing evidence-based policy is not simple. "Nowhere is this issue more evident than in the area of fire risk and community safety," he said.

"The failure of communities to adopt behaviours that experts see as selfevident is not necessarily evidence of community ignorance, intransigence or even resistance.

"In many cases it reflects the logical consequence of differences in values and risk perception or simply the fact that we are human and imperfect."

Professor Dawson opined that good policy will require a much more detailed understanding of how different members of the community and specialists think about and respond to risk.

"Surely this, along with the technical aspects of risk reduction, should be a research priority for state and federal governments," he recommended.

Italian region of Sicily, the largest island in the Mediterranean Sea, on 2 February, after a passenger car was swept away by floods.

Another four people in the car survived, as they were able to get out of the vehicle.

Experts say the main reason for the wet weather is a predominance of west and south-west winds, bringing in mild air from the Atlantic.▲

News

Obamacare threatens to 'extinguish' volunteer fire departments in the US

The Obama administration's Affordable Care Act could make volunteer fire departments obsolete

bamacare, a US medical aid programme that wanted to make sure all Americans were able to get health insurance, could force thousands of volunteer fire departments to close, according to US reports.

ira Fighte

Volunteer fire departments all across the US could find themselves out of money and unable to operate unless Congress or the Obama Administration exempts them from the Affordable Care Act.

The Affordable Care Act forces companies with more than 50 workers to buy them all health insurance or pay hefty fines. This poses a problem for volunteer fire departments, which cannot afford to take up health insurance for its volunteer fire fighters.

The US Internal Revenue Service (IRS) says volunteer fire fighters are employees, even though the Department of Labour says they're volunteers.

Out of more than one million fire departments in the US, 87 percent are staffed entirely or mostly by lifesaving volunteers

The US Department of Labour takes the term volunteer literally, but the IRS says volunteer fire fighters are technically employees if they're on the job more than 30 hours per week, making them subject to Obamacare's employeemandate rules.

Since the Obamacare law doesn't specifically carve out an exemption for fire fighters, fire departments where 50 or more people work either as volunteers or officially as employees are expected to provide health insurance for every one of them.

Members of US Congress have taken note, but the Obama administration has not yet taken any action to carve out a fire fighting exception.

In towns with more than one volunteer fire department, all the staffers will likely be grouped together for tax purposes, which would push many municipalities above the 50-worker threshold.

This could cost departments of lifesavers hundreds of thousands of dollars each year, according to US reports. Those that dump their volunteers into the federal insurance exchanges would still have to pay an annual \$2 000 fine for each employee after the first 30.

"I can tell you right now we can't afford it," Pennsylvania Fire Company chief, Edward Mann, told a state news organisation.

"While a volunteer fire department may not have a payroll, the rest of it isn't free. The only part that is free is the labour," he said.

Nationally, the Federal Emergency Management Agency reports that volunteer fire departments make up 71 percent of America's one million firehouses. Another 16 percent are mostly volunteer departments.

The International Association of Fire Chiefs (IAFC) has asked the IRS to let all volunteer departments off the hook. The federal government has taken no action so far.

'If the IRS classifies volunteer fire fighters and emergency medical personnel as employees in their final rule, fire departments may be unintentionally forced to comply with requirements that could force them to curtail their emergency response activities or close entirely,' the IAFC said in a statement.

In a statement, the US Treasury Department reported that it had received a number of comments concerning volunteer fire fighters and other volunteers in response to proposed regulations issued in December 2012.

"We are taking those comments into account as we work toward issuing final regulations on the employer-responsibility provision of the Affordable Care Act," informed the statement from the Treasury Department.

INTERNATIONAL INCIDENT COMMAND SYSTEM TRAINING

FFA Training in collaboration with: SA ICS, USA Instructors (Expert in their field) and North West University

Present the following Incident Command System courses during March 2014

Course Title	Course Detail	Date and Tarrif			
Basic Air Operations	Basic Understanding of the different functions of Air Operations Objectives: Describe the aircraft types and capabilities Aviation Management & Safety	17 March 2014 Working on Fire Academy R 5 90.00 (Excl Vat)			
Helicopter Management	Management of Helicopters during incidents and project operations Objectives: Identify the basic structure of Agency and Internal aviation policies and helicopter managers responsibilities	18 – 21 March 2014 Working on Fire Academy R 3 800.00 (Excl Vat) Pre-requisite: Basic Air Operations			
Single Engine Air Tanker Manager (Bomber)	Describe the support functions of a Single Engine Air Tanker (Bomber) Manager within the aviation organization or Bomber base and occasionally within an Incident Management Team framework	18 – 21 March 2014 Working on Fire Academy R 3 800.00 Pre-requisite: Basic Air Operations			
Aerial Supervision	Describe the role and responsibilities of and Air Tactical Group Supervisor, Helicopter & Bomber Coordinator Objectives: Effective utilisation of aircraft to meet incident objectives and coordination between aviation and ground recourses	24 – 28 March 2014 Working on Fire Academy R 5 400.00 (Excl Vat)			
Incident Safety Officer	Describe the role and responsibilities of an Incident Safety Officer within an Incident Management Team during an Incident Objectives: Assessing and maintaining incident safety	17 – 21 March 2014 Working on Fire Academy R 5 400.00 (Excl Vat)			
Liaison officer	Liaising and communication with different Agencies, Stakeholders and Communities during incidents	17 – 19 March 2014 Working on Fire Academy R 3 000.00 (Excl Vat)			
Intermediate Incident Command System (All Hazard)	Describe the Incident Command System organization and supervisory roles on single or multiple agency/jurisdictional incidents	24 – 28 March 2014 North West University – Potchefstroom R 5 400.00 (Excl Vat)			



Contact:

Northumberland workshop live burn exercise

Partnership project to reduce wildfire risk in Northumberland

orthumberland Fire and Rescue Service (NFRS) and the Northumberland National Park based in the UK, have begun work on a project to help reduce the risk of wildfires in the county.

The Northumberland Collaborative Burning Project is also supported by the Northumberland Fire Group; a multiagency stakeholder group created to address wildfire issues, that will help protect people, the economy and the environment.

Dry springs and summers during recent years have led to the need for such a project, which will see NFRS deliver specialist training to fire fighters in Bellingham, Rothbury and Wooler. The next generation of fire fighters will also be provided with these new skills as NFRS visit branches of the Young Fire Fighters Association for those aged 13 to 18.

Alex Bennett, chief fire officer for Northumberland County Council said: "Unless the heather moorland is properly managed, the peat soils which have taken thousands of years to establish can catch fire and burn right down to the bedrock. The additional training we can provide to our staff and those at the national park will ensure an effective partnership that works to reduce the risk and spread of wildfires in the future."

The training is designed in two parts; a theory session delivered at each fire station; and a hands on practical training session called a collaborative burn in various sites throughout the park.

Each collaborative burn will be completed by trained wildfire experts from NFRS, retained fire fighters from rural fire stations and local landowners and managers. This training exercise involves creating a fire in an area of the park and has two key benefits; helping those involved to work together safely, effectively and efficiently to reduce the fuel loads that naturally build up in the moorland over time; and by reducing the amount of fuel this lowers the risk of wildfires occurring and spreading throughout the park in the future.



NFRS will purchase additional wildfire suppression equipment as part of the project



Dry springs and summers during recent years have led to the need for the Northumberland Collaborative Burning Project

Record rainfall in Brazil during December 2013

he US National Aeronautical and Space Administration (NASA) reports that its earth observatory satellites indicated a rainfall rate anomaly in Brazil in December 2013.

December 2013 was an extremely wet month for at least three states in southeastern Brazil namely, Bahia, Espirito Santo and Minas Gerais.

According to a preliminary analysis conducted by chief meteorologist in the analysis and forecast division of Brazil's National Meteorology Institute, Márcia Seabra, at least seven cities in Brazil set new records for the most rain received in a single month by 27 December last year.

The Aimore and Minas Gerais regions, received 852,4 millimetres of rain from 1 to 27 December, more than 400 percent of the average December rainfall. The previous record, set in November 2010, was 350,4 millimetres.

Satellite-based measurements of precipitation show the wider pattern throughout the states. NASA compared the rainfall rates of December 2013 with the average rainfall of the December periods between 1998 and 2012.

The study showed that rainfall in 2013 was much more intense (more rain fell daily) than average. The measurements were drawn from the Real-Time Tropical Rainfall Measuring Mission (TRMM) Multi-satellite Precipitation Analysis, which is based on data from the TRMM satellite.

"This event is extreme, but the pattern is similar to one that appears in TRMM observations of Brazil during the Southern Hemisphere summer", says NASA's Goddard Space Flight Center scientist, George Huffman. Usually the area of heavy rain is farther south or west and the rainy region over the ocean is much smaller, reports NASA.

The extreme rain resulted in widespread flooding and landslides that left 45 people dead, some 70 000 evacuated and many communities isolated by the collapse of roads, according to the UN Office for the Coordination of Humanitarian Affairs.



Brazil experienced record-setting rainfall and flooding in December last year

The cost of infrastructure repairs in Espirito Santo, following flooding in the state, is expected to reach about \$227 million, according to the state Government.

Four of the record-setting cities listed above, including Aimores lie along the Doce River, which flooded as a result of the intense rain.

► The younger fire fighters will receive wildlife training, map reading and navigational skills that are vital for fire fighters attending wildfire incidents and are also key, transferable skills for those who may enter into land management professions.

The project is being supported by Northumberland National Park Authority's, (NNPA) sustainable development fund.

Andrew Miller, head of programmes and conservation at NNPA said: "Northumberland National Park has some of the most important moorland habitats in Europe. Fire has been used to manage these areas for centuries and it is important that all of us involved in there protection work together and share knowledge, expertise and experience. This project brings together farmers, shepherds and gamekeepers with fire fighters and national park staff in a very positive and practical way".

One of the farmers involved in the project is Andrew Rogerson at Belshiel Farm, he said: "This project will enable farmers like me who are working in the national park to work and train with the fire and rescue service for mutual benefit. During the project the local fire crews will be familiarising themselves with the area and we will be developing good working relationships. This project is helping us to work together to manage fuel and prepare for potential future wildfires."

In addition to the training and collaborative burns, NFRS will purchase additional wildfire suppression equipment as part of the project. This equipment will be stored within the national park for use at wildfire incidents in the park and during future training exercises.

Northumberland National Park Authority - Northumberland National Park cares for the landscape and cultural heritage of 105 000 hectares; over a fifth of Northumberland from Hadrian's Wall to the Scottish border. The Northumberland National Park Authority (NNPA) Sustainable Development Fund (SDF) is there for the benefit of the Northumberland National Park. It is open to local communities and businesses as well as groups wishing to visit the protected area.

The SDF independent panel, which is responsible for making decisions about allocation of the SDF, always looks to support innovative projects that haven't been tested before. As a guide, communities can apply for up to 75% of their project costs and businesses for up to 50%.

News

US 9/11 fire fighters claim false disability-pension grants



Eight retirees from the FDNY and NYPD are under investigation for fraudulently claiming 9/11 disability-pension programme

ight US fire fighters and police officer retirees from the New York Fire Department (FDNY) and the New York Police Department (NYPD), respectively, are facing prosecution by US authorities for fraudulently claiming 9/11 disability grants.

The former fire fighters and police officers pretended that they were at Ground Zero and suffered emotional trauma, receiving monthly Social Security disability checks. They are among 106 other alleged scammers in a massive \$400 million Social Security fraud investigation, dating back to the 1980's, currently being conducted by US authorities.

Many of the offenders claimed that they could not sleep, do simple calculations or even leave their own home. However, state investigators found that they had been, either riding jet-skis, running half-marathons or piloting helicopters and even teaching karate in one case.

"That's about as inconsistent with being disabled and unable to perform physical or mental chores as you can get," said New York district attorney Cyrus Vance. The NYPD and FDNY alleged con artists were arrested on 7 January and were already retired with disability pensions from their departments.

Four ringleaders, including an 81-yearold ex-FBI agent and an 89-yearold pension adviser, instructed the retirees how to pocket \$20 000 to \$50 000 a year, in bogus claims.

At least half of them shamelessly exploited the 9/11 terror attacks by saying they were suffering from posttraumatic stress disorder, when some were never at Ground Zero.

They were coached to lie by former police officer, Joseph Esposito, 70, stated US prosecutors involved in the case.

Esposito filed for his own Social Security disability in 1991, a year after retiring on disability from the NYPD at age 46 for two motor-vehicle accidents 'in the line of duty', according to US authorities.

Many of the retirees said they were so mentally incapacitated that they couldn't even use a computer, drive a car or fly in a plane. They received a fee that involved being issued 14 monthly Social Security checks.

District attorney Vance said that up to 1 000 people could be involved in the scam, adding that the total dollar >



Investigators have gathered evidence to show fake disability-claims of retired NYPD and FDNY servicemen



A retired NYPD employee who faked 9/11 illnesses turns himself in to US authoritiesinvestigation for fraudulently claiming 9/11 disability-pension programme

US Air Force helicopter crashes at nature reserve in UK

A body is carried away from the USAF helicopter crash-site in Norfolk, England

our US Air Force (USAF) crew members were killed when their helicopter crashed in Norfolk in the East of England on 7 January this year.

The HH-60G Pave Hawk helicopter, which crashed in a nature preserve on the North Sea coast of England, was part of 48th Fighter Wing based at the Lakenheath Royale Air Force in the UK.

The USAF crew members onboard the aircraft were captain Christopher Stover, captain Sean Ruane, technical sergeant Dale Matthews and staff sergeant Afton Ponce, all of whom died on the aircraft.

Recovery of the bodies of the four personnel was handled by Norfolk

estimates of the amounted to about\$400 million.

In 2010, US media first reported that two dozen retired cops were under investigation for claiming mental illness to receive Social Security disability payments while still holding gun permits.

Their disability applications indicated that they were incapable of owning firearms, said NYPD chief of Internal Constabulary chief superintendent, Bob Scully.

"You would be very much mistaken if you thought that this would be a quick process," the chief superintendent told local reporters in Norfolk.

"A lot hinges on our ability to understand what happened to the aircraft that crashed, and that includes the detailed investigation that needs to be done."

The Royal Air Force base said the crash occurred during an evening training mission while the helicopter was flying low.

Specialists from the Royal Air Force, the USAF and investigators from the

Affairs, Charles Campisi. "However, when we dug deeper and we checked the forms that they filed with the Police Department in order to get pistol permits, they indicated that they were of sound mind. So, we had a discrepancy,'' stated Campisi.

Investigators found a treasure trove of 'damning evidence' on social media websites like Facebook, Twitter and YouTube, along with car-rental, shopping and airline receipts. Norfolk Constabulary were working together to find out what happened, he said.

Removal of the dead from the aircraft 'can disrupt the evidence and so it has to be done methodically, step by step', Scully told reporters.

According to the Air Force website, a Pave Hawk is a 'highly modified' version of a Black Hawk helicopter that often carries a crew of two pilots, one flight engineer and one gunner.

Pave Hawk helicopters are used for combat search and rescue, recovering downed aircrew or other isolated personnel in combat situations.▲

One of the worst alleged offenders was ex-cop Louis Hurtado, who was caught teaching karate. He netted \$470 000 and had been conning the system the longest, since 1989, according to authorities.

The retirees included 72 ex-NYPD cops, eight former FDNY firemen, five ex-corrections officers and one former Nassau County, New York police officer. ▲

Indonesia's Sinabung volcano erupts, killing 15 people



The 2 600 metre Mount Sinabung volcano spewed lava and searing gas in February



Searing ash up to 1 200 degree Celsius billowed into the air after the Sinabung eruption

ifteen people were killed in a catastrophic volcanic eruption in Indonesia, just a day after authorities allowed thousands of villagers to return to their homes on its slopes.

Residents in the 'danger zone' around Mount Sinabung in North Sumatra, which had been rumbling for months, had been evacuated for their safety but were told that activity was decreasing before the eruption on 1 February this year.

The 2 600 metre volcano spewed lava and searing gas, sending rocks and burning ash raining down its southern slopes.

Searing ash up to 1 200 degrees Celsius in temperature raced down the slope in just two to three minutes, engulfing Sukameriah, a village close to the volcano's crater.

Rescue workers called of search efforts after recurring eruptions of Mountain Sinabung, said Indonesia's disaster officials.

A mixture of local rescue workers, military personnel and police forming the recovery teams, ventured into the affected area two days after the last eruptions, before calling off their search when conditions became unsafe.

Television footage showed pyroclastic flows of hot gas and rock reaching up

to four kilometres away and villages covered in thick grey ash.

A local television journalist and four high-school students with their teacher, who were visiting the mountain to see the eruptions up close, were among the dead, according to National Disaster Mitigation Agency spokesperson, Sutopo Purwo Nugroho.

The rescue teams were conducting search operations within a threekilometre radius of the volcano.

Series of evacuations

Authorities in western Sumatra had evacuated more than 30 000 people, housing them in cramped tents, schools and public buildings, but many had been desperate to return to check on homes and farms.

A day before the latest eruption on 1 February, the government allowed nearly 14 000 people living outside a three-mile danger zone to return home after volcanic activity decreased.

Some living close to the peak have been returning to their homes over the past four months despite warnings.

Following the eruption, all those who had been allowed to return home were ordered back into evacuation centres.

The latest volcanic activity has forced people to evacuate 16 villages,

the Jakarta Post reported. At least 30 000 people have been temporarily housed at 42 evacuation centres, according to the emergency response director in Indonesia for the humanitarian group World Vision, Billy Sumuan.

Indonesia is prone to seismic activity due to its location on the Pacific 'Ring of Fire', an arc of volcanoes and fault lines.

Mount Sinabung is among about 130 active volcanoes in Indonesia and has sporadically erupted since September.

In 2010, 324 people were killed over two months when the country's most volatile volcano, Mount Merapi, roared into life.

As in Sinabung, authorities struggled to keep people away from the mountain.

Scientists monitor Merapi, Sinabung and other Indonesian volcanoes constantly, but predicting their activity with any accuracy is almost impossible.

The latest eruptions came just a week after President, Susilo Bambang Yudhoyono, visited displaced villagers in Sinabung and pledged to relocate them away from the mountain.

Villagers are attracted to the slopes of volcanoes because the eruptions create fertile soil for farming.

News

A column of smoke arises from the crater of the Pacaya volcano in Guatemala

Guatemala residents evacuated as Pacaya volcano erupts

he eruption of the Pacaya volcano in the central American country of Guatemala, prompted Government officials to evacuate those living nearest the crater in January this year.

The eruption sent volcanic material as high as 400 metres into the air, while the ash from the eruption rose as high as 1 000 and 2 000 metres into the atmosphere, according to the Guatemala Institute of Vulcanology.

People living close to the Pacaya volcano, located near the country's capital, Guatemala City, were

evacuated when lava began flowing down one side of the volcano on 11 January, reported Guatemala's National Office for Disaster Reduction director, Alejandro Maldonado.

The National Institute of Seismology, Volcanology, Meteorology and Hydrology says the lava flow in some areas is as large as 600 metres wide and three kilometres long.

Guatemala officials said that the ash residue from the volcanic eruption posed a threat to the country's air traffic. "Ash could spread over Guatemala City due to the direction of the wind," stated the Guatemala's National Office for Disaster Reduction. Pacaya is one of Guatemala's most active and picturesque volcanos.

The last major eruption of the 2 552 metre-high Pacaya was in May 2010 and claimed the life of a television journalist. Thousands of people fled from their homes and the eruption forced the closure of the Guatemala City airport for five days.

The volcano is located 50 kilometres south of the capital and is one of three active volcanoes in Guatemala.▲

Isipingo factory in KZN gutted by fire

A shoe components factory in the seaside resort town of Isipingo, south of Durban, KwaZulu-Natal was gutted in a fire in January this year.

Three fire engines from the Amanzimtoti Fire Station were dispatched to Rana Road, Isipingo, where two factories caught alight on the afternoon of 22 January at around 15h00.

Amanzimtoti Fire Station division commander, Nelson Pillay, said, "When we arrived on the scene a fire was burning on the top of the first building closest to the road. There was a fire in front of the second building, as well as inside the building."

Support was increased with a fourth fire engine as well as a hydraulic

platform and water carriers, reported Pillay.

To stop the fire spreading to a third building, a fire curtain was put up. The fire was contained at about 16h30 and damping the fire continued until 22h00.

"There were no causalities. Fire specialists are investigating the cause of the fire," said Pillay. \blacktriangle



Evidence is pulled from the remains of a fire-charred retirement home in Quebec, Canada

Retirement home residents caught in massive blaze

massive blaze swept through a three-storey retirement home in L'Isle-Verte, about 225 kilometres northeast of Quebec City, Canada in the early hours of the morning on 23 January this year.

A total of 32 people were believed to have been killed in the massive blaze, although just 10 bodies were found in the charred remains of the Quebec building following the incident.

Emergency crews recovered only two more bodies in addition to the six previously discovered at the site, which was later covered in ice as thick as 60 centimetres in a wintery Quebec. The frigid temperatures continued to hamper the search.

Search teams brought in equipment normally used to de-ice ships that pushes out very hot air. "You can imagine how difficult it is to go through the ice, melt it and do it in a way that we preserve the integrity of potential victims," said Quebec Provincial Police lieutenant (Lt), Guy Lapointe. "So, it's very difficult work again today. It's very cold."

Search teams of police, fire fighters and coroners slowly and methodically

picked their way through the ruins, working in shifts in the extreme cold with temperatures hovering around minus 20 degrees Celsius.

The cause of the blaze in the small town of L'Isle-Verte remains under investigation. There were media reports that the fire began in the room of a resident who was smoking a cigarette, but police said that was just one possibility among many.

"It could be a cigarette, it could be a small heater, it could be an electrical problem," said police Lt Michel Brunet, in a news conference. "We have to be sure at 100 percent."

Quebec Provincial Police lowered the number of missing from about 30 to 22 based on more detailed information.

About 20 elderly residents survived the fire. Some were moved to other residences for the elderly in the area and the Red Cross had raised about \$180 000 to provide clothes, hearing aids, wheelchairs and other urgent needs.

"Because they left their residence so quickly, they left with nothing," said Red Cross spokesperson, Myrian Marotte. "We're looking at providing them with those very urgent articles."

Many of those who died were confined to wheelchairs or used walkers and some had Alzheimer's. Fire fighters responded within minutes of getting the alarm, but said they could only reach one-third of the building because the fire was too intense.

Quebec Minister of Social Services, Veronique Hivon, said many of the village's volunteer fire fighters had relatives at the retirement home. "People are in a state of shock," said Hivon. "We want them to know the services are there by going doorto-door. It's an important building that's a part of their community that just disappeared."

According to Hivon, the home was up to code and had a proper evacuation plan. A Quebec Health Department document indicates the home, which has operated since 1997, had only a partial sprinkler system.

An official memorial ceremony featuring Quebec dignitaries was scheduled for 1 February this year.

Night fire destroys ancient Tibetan town in China

n ancient Tibetan town in China's southwest Yunnan province, Dukezong, was devastated by a fire that raged for 10 hours on 11 January this year.

The inferno raged for hours on end, destroying a popular tourist town in an ancient Tibetan region in China's southwest Yunnan province.

The neighbourhood of Dukezong and its labyrinth of houses were engulfed in flames that turned the night sky red.

There was no immediate report of casualties and the cause of the fire was unclear, although a provincial news site said it started in a guesthouse on an old street.

The ancient Tibetan quarter of Dukezong, where the fire broke out, dates back more than 1 000 years and is known for its preserved



Fire destroys more than 100 homes in ancient Tibetan village

cobbled streets, ancient structures and Tibetan culture.

The county was once called Gyaitang Zong, but changed its name to Shangri-La in 2001, hoping to draw tourists by the reference to the mythical Himalayan land described in James Hilton's 1933 novel.

The county has since benefited from tourism revenue. Hundreds of other Chinese cities have also rebuilt their old streets to attract visitors. More than 2 000 fire fighters, soldiers, police, local officials and volunteers responded to the blaze and brought it under control around 11h00, according to the Shangri-La county government.

News

More than 100 houses in the old Dukezong quarter were destroyed, said local authorities.

Most structures were made of wood and the fire spread easily because of dry weather.▲

Forty-car pileup on US interstate highway

More than 40 cars were involved in a vehicle pileup that left one couple and another man fatally injured in northwestern Indiana in the US.

The three people were killed in the massive pileup on a snowy highway on 24 January this year, which left a further 20 people injured in the crush of semitrailers and mangled passenger vehicles on the US Interstate 94 that connects Chicago with Detroit.

A sudden turn in the weather that saw a burst of heavy snow took everyone by surprise on the road, as conditions turned very quickly from clear to 'near-whiteout' at the time of the crash, said Indiana state police lieutenant, Jerry Williams.

"As these people came into that whiteout condition, it became that environment where they couldn't see each other," Williams said in a news conference after the incident.

Emergency crews, made up of fire fighters and Indiana state police, responded to the scene to clear up the crash site involving more than 40 vehicles, many of which were semitrailers. Cranes and wreckers were brought in to help remove the wreckage that included two box or cube trucks and 18 semitrailers among the 46 vehicles, reported officials. National Weather Service meteorologist, Evan Bentley reported that a band of heavy lake-effect snow was reported on 23 January afternoon when the pileup began, dropping around three centimetres of snow per hour and reducing visibility to about 300 metres or less.

Those drivers that were stuck in the highway backup could only wait and try to stay warm as temperatures hovered around minus 12 degrees Celsius.

Indiana State Police sergeant, Ann Wojas, said 20 to 30 people were injured, including one with life-threatening injuries and another who was flown by medical helicopter to a local hospital.



A 40-car plus pileup in Chicago claimed three lives in January

Western Cape fire season

Western Cape fire season

The impressive Airtractor AT802 water bomber with the FFA Aviation pilots and management at the recent launch of the Western Cape fire seasonlives in January

he South African Western Cape fire season was launched by the Western Cape Disaster Management Centre (WCDMC), Western Cape Government. Department of Environmental Affairs, City of Cape Town Fire and Rescue and Working on Fire (WoF) at Stellenbosch Airport in December 2013.

Working on Fire's Shane Christian presented a brief overview of the Western Cape fire season after which Colin Deiner, chief director, disaster management and fire brigade services, Western Cape Government, explained how the province improved on its one hour response time. Deiner said that the reduction in major incidents during the last season proved this and said that the Province has increased its resources for the upcoming season and prepared well. "We are ready", said Deiner.

Minister of Local Government, Anton Bredell, welcomed Ronnie Kasrils, one of the key founding fathers of the Working on Fire Programme as well as the various key role players. In his speech, Minister Bredell said that the Western Cape Province had been identified in South Africa's Initial National Communication on Climate Change, as the most vulnerable region in the country with respect to disaster risks from wildfires due to patterns of urbanisation, agriculture and potential impacts upon water catchment areas. "Fires in the central parts of the Fynbos Biome are projected to continue to increase in the future, "said Minister Bredell.

He added saying: "The Western Cape Government identified the need for a rapid response to wildfires in their early stages and established its rapid response programme during the 2011/12 wildfire season. This programme is designed around the principle of responding the maximum amount of aircraft and ground teams to a fire in its early stages. By gaining control within the first hour of the fire the possibility of a major incident is minimised. Recognising the critical role that a rapid, specialised aerial response makes in significantly reducing fire damage, the Western Cape Government has contributed towards the capital costs of the aerial fleet."

The aerial support for the Western Cape fire season will consist of 26 aircraft including:

- Eight Cessna spotter aircraft
- Eight bell UH-1 helicopters
- Eight fixed wing Dromader water bombers
- Two fixed wing Airtractor 802 bombers.

The two new Airtractor 802 fixed-wing bombers have a larger capacity and longer range than the Dromaders.

A scientific GIS based method of determining the optimal placement of these resources is used, which takes into account the veld type, age and risk profile of the area. The available resources are then placed in areas where they will be able to respond in the shortest possible time to the maximum effect.

For the 2012/13 season it was decided to increase the number of runways from 26 to 36, which significantly improved the response times for the bombers.

The province experienced its highest intensity of fires at the end of January 2013 when four major fires flared up>



simultaneously in various parts of the province. A large scale aerial support capacity was activated and this led to 26 aircraft operating at the same time.

The Western Cape's Disaster Management and Fire Brigade Services is responsible for monitoring of municipal fire services, coordination of fire fighting activities and the administration of the Fire Services Act. In order to achieve this, the following activities are performed:

- Coordination of provincial wildfire aerial support programme
- Fire prevention and public information programme
- Informal settlement fire safety
- Special operations response coordination



Minister Anton Bredell



Colin Deiner



The public has the right to know what is happening during wildfires and it has happened that the media sometimes sensationalises the event. Most role players and public would be interested in the actions taken by the various parties at both wildfires and controlled burns.

For this reason, public information officers, trained to deal with members of the media, will be stationed at incident command centres at big fires. "Working on Fire is a key partner and stakeholder of my department and provide essential services in terms of aerial support and ground crews spread across the province, stated Minister Bredell.

During the last three years, WCDMC, together with the province, have established a special operations response team that consists of highly trained rescue specialists who are capable of responding to major disasters involving collapsed buildings.

There are currently 80 of these people working at various municipal fire services and rescue bases in the province and can be called upon at any time to respond to emergencies



Trevor Abrahams



Ronnie Kasrils



Mike Assad

Western Cape fire season

A Dromader fixed-wing bomber in action



► not only within the Western Cape but also in South Africa and internationally.

Trevor Abrahams, managing director of FFA Operations, which manages the Working on Fire programme, showed a video showcasing the programme and its success story since its inception in 2003 and thanked Ronnie Kasrils for his foresight.

Dr Guy Preston of DEA said that the Working for Water programme was a good predecessor for the Working on Fire programme and how humanity has always used water to control fire. He commented on the partnerships that have been formed in order to control fires and paid tribute to Johan Heine and Chris de Bruno Austin, co chief executive officers of the FFA Group, for their passion and for driving the Working on Fire Programme. "I also want to salute the Western Cape for partnering with Working on Fire," concluded Dr Preston.

Mike Assad, operations manager of FFA Aviation detailed the advantages of the new Airtractor AT 802 bomber aircraft and said that the second Airtractor was already on its way. And will be arriving in a few weeks' time. Assad said that the AT 802 bomber pilots were trained in Spain and showed a video showcasing the capabilities of the aircraft. Assad concluded in saying that it was the only American aircraft specifically designed for aerial fire fighting and that its load capacity of 3 000 litres of water was able to discharge a extinguishing spread of over 800 metres on the fire line at a speed of 300 kilometres per hour.

An impressive demonstration of the Airtractor AT802 bomber followed and was assisted by several Huey choppers, a spotter and Dromader water bombers. A Working on Fire ground crew assisted with the mopping up of the 'fire'. ▲

Gerry with learners from Berghof Primary School West Coast

Awareness campaign targets schools in vulnerable communities

outh Africa's Western Cape Disaster Management, through Department of Local the Government, rolled out its annual fire and flood awareness campaign across the five district municipalities. The 2013 campaign, originally launched in 2006, reached around 16 553 learners across the Western Cape in far outlying, rural The roadshow aimed to areas. mitigate the prevalence of fire and flood related incidents/disasters that cause injury, loss of life, damage to property and displacement of people.

A 30-minute industrial theatre piece was used to educate target

audiences on the dangers of fires, floods and other hazards such as snowfall. It demonstrated preventative measures, actions to be taken in case of these emergencies, as well as the emergency numbers 10177 from a landline and 112 from a cellphone. This campaign was used ahead of the fire season to try and minimise unnecessary fires.

Public awareness in disaster risk reduction is, and continues to be, one of the most effective disaster risk reduction enhancing measures as it enables 'at risk' communities to prepare themselves to overcome the consequences from prevalent

nstrated warnings and support recovery ns to be operations. It has been internationally gencies, recognised that this especially applies to school children and students. 2 from a as used TheDepartmentofLocalGovernment, try and through its Western Cape Disaster

requirements

through its Western Cape Disaster Management Centre (WCDMC), on an annual basis implements a hazard awareness campaign. It is a priority project of the Department of Local Government and aims to raise awareness primarily on fire and flood safety in the province, as these are two commonly occurring hazards affecting vulnerable people and communities.

disaster risks, prepare actions and

for responses

to

Gerry the Giraffe, the campaign's official mascot, was back to entertain adults and children alike. With his long neck, Gerry can spot a disaster from miles away and enforces the message of preparedness.

Pamphlets were handed out in the dominant language of the area for children to take home and to discuss further in class, as well as stationary with the emergency number 10177 and 112. Posters were also handed out for teachers to put up in their classrooms. These posters showcased the best ways to prepare and respond to fire and flood related incidents.





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Alleviating Poverty, Conserving the Environment, Improving Lives

Fire Service Indaba: Fire safety

he National Disaster Management Centre Directorate: Fire Services Coordination consulted the various stakeholders and subject experts in South Africa with the aim to publish a white paper (policy) on fire services.

Fire prevention and risk reduction will form the core of the envisioned policy and it was decided to host a proactive Fire Services Indaba. The three-day Indaba took place in Newlands, Cape Town and its purpose was to discuss and examine the policy issues around fire prevention, fire safety and fire protection to be included in the white paper and later in the new fire services legislation.



Dr Hildegard Fast



Colin Deiner



Anè Bruwer



Etienne du Toit

The first day was dedicated to fire prevention and Dr Hildegard Fast, head of department, Local Government, Western Cape, welcomed all and said that the roles that the emergency services play is paramount in the reduction of loss of life. She also stated that fire safety is not always about the quantity of the resources but foremost about the coordination of the resources. Quoting Minister Anton Bredell, she said that 80 per cent of the focus should be on proactive issues and 20 per cent on reactive.

Colin Deiner, chief director, disaster management and fire brigade services, Western Cape Government, said in his opening presentation that "you still need people on the truck when the alarm goes but if you don't focus on the preventative measures and training, the response side would be worse."

The National Disaster Management Centre's (NDMC) executive director, Anè Bruwer reiterated the fact that prevention is paramount and added the importance of ensuring building safety. She urged attendees to investigate and implement best practice to prevent major incidents.

Etienne du Toit, deputy director, fire brigade services, Western Cape Government, presented a synopsis of South Africa's recent fatalities and injuries statistics and that this Indaba is an opportunity to influence policy. "The proactive approach is the only way. Start at home and preach the message," said Du Toit.



Johan van den Heever

Principle fire protection officer at the Fire Protection Association (FPASA), of Southern Africa Johan van den Heever, aave an overview of the fire problem in South Africa and auoted Dr Tim Noakes in saying "fire is not an exact science." Van den Heever gave a historic overview of FPASA and reminded all that "we shouldn't forget about the importance of fire investigation." He compared statistics of fire-related

deaths, brigade calls and fire losses for 2011. Van den Heever also discussed the most common causes of fires and the economic impact of fire losses. He warned that not all fire services were submitting data and that the cause of fires is mostly quoted as undetermined. He also raised concerns regarding the inaccurate estimations of damage (Rand value). Van den Heever furthermore reviewed the Insurance Fire Incident Reduction Strategy (InFIReS), National Fire Information Resource (NaFIRe) initiative and the Fire Loss Analysis report (FLARe). He said fire brigades were encouraged to contribute to the projects and that input data on the website now include hazmat incidents, monetary losses from insurers and fire losses from fire services.



Jens Jacobson of Fire and Disaster Dynamics gave a legislative overview for fire prevention in South Africa that included the National Building Standards Act (NBSA) and regulations, South Africa Bureau of Standards (SABS) 10400 part T and W and other SABS standards and bylaws. Jacobson said that the total cost of a fire includes the cost of providing a fire brigade service and fire protection system, direct

Jens Jacobson

fire losses (uninsured) and insurance premiums. "Theft is just a change of ownership but fire loss is permanent," stated Jacobson. "We need an optimised fire prevention strategy to beat the problem."



Sandra du Rand

Executive manager: proactive services for Ekurhuleni Emergency Services, Sandra du Rand, presented the current organisational approach to fire prevention and outlined the typical core function of the fire brigade service. She said that: "We currently address what comes across our table; not what we have to address." She

Fire Service Indaba

said it was important to motivate additional fire safety positions. Du Rand compared the area, population, the number of fire services and households (formal, informal and traditional dwellings) of the three metros in Gautena ie City of Ekurhuleni , City of Tshwane and the City of Johannesburg Emergency Services. She outlined the current organisational approach for City of Ekurhuleni, City of eThekwini, Nelson Mandela Bay, Midvaal, City of Johannesburg and City of Tshwane EMS and the gaps identified. Du Rand presented a list of recommendations received from the participating services.



lan Schnetler, chief fire officer (CFO), City of Cape Town Fire and Rescue Service said that fire fighters like to put the 'wet stuff on the red stuff' but that fires should be prevented in the first place. Schnetler shared a video clip of a shack fire in which it takes only one minute, 20 seconds to become fully involved. He presented an overview of the City of Cape Town Fire and Rescue Service and its statistics and

Ian Schnetler

said that it was time for a paradigm shift from reactive to proactive across all spheres. Schnetler also reiterated the fact that operational staff only spend 20 per cent of their time 'putting wet stuff on the red stuff' and that the other 80 per cent should include training and preventative measures; with fire safety messages aimed at where the majority of incidents occur.



Previn Govender

Breede Valley Fire department's CFO, Previn Govender, discussed improving fire prevention through code enforcement and defined enforcement and fire code prevention. Govender added that code enforcement can mean anything from fire inspections to speaking to a citizens' group about burning garden debris. "We cannot talk about code enforcement if we ourselves don't understand it," said

Govender. He discussed the three 'Es' of fire prevention ie engineering, education and enforcement. He emphasised the importance of a risk-based inspection programme and to prioritise the use of resources. He concluded in saying that the community must be part of the solution and that cooperation is generally more effective than confrontation.

FPASA's Johan van den Heever discussed improving fire prevention through engineering and discussed fire safety engineering and rational design. He reviewed the applicable legislation, the function of building standard 7974 in South Africa and the fire engineering and design process. He said that at its most superficial level, it is recommended that a fire engineered project should comprise of three stages: qualitative design review (QDR), quantitative analysis and assessment against criteria. He discussed this in detail and concluded by saying that the responsibility rests on the building owner, appointed fire engineer, building control officer and the fire safety officer to conclude that the rational design has satisfied the Regulations of SANS 10400 T:2011, T1 (1) (a) to (e) and (2).



Ed Jowitt



Riaan van der Pool



Moses Khangale

Ed Jowitt, CEO of the Sysman Group, introduced its new tablet project but didn't reveal too much information as it is currently in beta phase and will only be rolled out in 2014. Jowitt said it would offer two solutions ie cloud-based data and a tablet-based App for inspectors. He said that the main objective is for fire inspectors to be able to input all data digitally and syncing it to the fire safety database. He added that the system will allow recording of the violation at any time, photoaraphina and geo locating it, then emailing it as soon as a connection is available.

Senior engineer at the CSIR-Meraka Institute, Riaan van der Pool, presented the new fire App from AFIS that includes a fire danger index (FDI) calculator, burn sum ie historic fires on the same area and the ability to send details to the people on the ground via SMS. He also overviewed the AFIS system and highlighted the importance of fire detection.

Moses Khangale, senior manager: fire service coordination at the NDMC, said that the White Paper for >



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Fire Service Indaba

Fire Brigade Services will include fire safety and prevention and reviewed the discussion topics and resolutions for the day. These included fire detection systems, research, bylaws, national oversight, training for fire safety and linkages across the various institutes.



The second day focused on community fire risk reduction and Rodney Eksteen, assistant director, brigade services, Western fire Cape Government, discussed the characteristics of community risk reduction that includes proactive, systematic, prevention-orientated, community-based, data-driven, effective and response to resource constraints.

Rodney Eksteen



Professor Ashley van Niekerk

Professor Ashley Niekerk, van specialist scientist at the South African Medical Research Council, shared several burn statistics and said trends were on the increase and that distribution of incidents was unequal. "You have to have credible information otherwise you are not going to be successful in fire risk profiling. South Africa is in need of a paradigm shift; a coordinated fire safety action plan, said Prof van Niekerk. "There is no single silver

bullet solution. The issues at hand need our attention in developing several solutions to address fire safety. Let's identify hotspots. Let's get tailored plans for these hotspots and reduce these incidents. Part of the solution is creating partnerships within government," stated Prof van Niekerk.



Jackie Waddilove



David Waddilove

cost of wildfires and compared

Eastern and Western Cape. "A fire

protection association on district

level is imperative. Decision making

is not aligned with accountability at

present, which poses complications,"

Roland Hendricks, Gauteng DMC, gave an organisational perspective

on fire safety in Gauteng Province.

Hendricks reviewed the population

said David Waddilove.

David and Jackie Waddilove, Global Environment Fund (GEF) Project, discussed fire in the fynbos biome and presented attendees with a legislative and sectorial overview, highlighting the unique fire-dependent biome of the Western Cape. They discussed the national



Roland Hendricks

statistics of Gauteng Province and said that 4,5 million people live in Johannesburg, 3,1 million in Ekurhuleni and 2,9 million in Tshwane, resulting in 85,90% of all the people in Gauteng living in the three Metro's. He discussed the Gauteng Directorate: Fire and Rescue Services, its vision and defined the fire and emergency services heads committee (FESH), its strategic objectives and key challenges. Hendricks also discussed the four technical task teams ie fire and rescue services operations, training and development, fire safety and PIER and said that the bulk of the budget is allocated to fire safety. He concluded by saying with the future planning of Gauteng becoming a 'city', the placement of resources will be crucial.



The Household Energy Safety Association of South Africa's (HESASA) Patrick Kulati, introduced formed the recently HESASA and said "our work is holistic." He reviewed energy usage and energy related fires, fatalities and injuries in South Africa and said that HESASA was expanding their mandate. Kulati said that there was a definite need for a household energy policy in South Africa.

Patrick Kulati

Rodney Eksteen gave an overview of the public information, education and relations (PIER) programme and defined its goals ie to increase awareness of the fire department services and operations; to develop a positive perception of the fire department, its services, programmes and people and to reduce cost of reactive services through effective proactive services. "We can't be everywhere, so we need to focus in the high risk areas; get the biggest bang for our buck," said Eksteen. He highlighted the importance of proactively approaching the media and community emergency response teams (CERT). Eksteen reiterated the importance of evidencebased burn prevention intervention and said that the message must talk to the target audience.



Nabeel Rylands, deputy director, risk reduction, Western Cape Disaster Management Centre, discussed the use of geographic information systems (GIS) in community fire risk reduction planning. Rylands gave an overview of the major risks in the Western Cape and said that hazard mapping was done on a large scale. "The key is to have a complete provincial risk profile," said Rylands. He said that the AFIS system was

Nabeel Rylands

also used to allocate resources for the past fire season, which resulted in 95 per cent of fires being under control within one hour. "By using GIS, you can overlay data ie high unemployment areas and vulnerable communities. Disaster management is using GIS as a decision support tool so that when there is an incident, they can identify what infrastructure will be at risk," concluded Rylands.

Goodwood station commander and media spokesperson for City of Cape Town Fire and Rescue Service, Theo Layne, gave attendees an insight to dealing with the media and ►

Fire services training and development

he 2013 Fire Services Training and Development Workshop was held in Durban, South Africa, by the Department of Cooperative Governance. This was the last in the series of workshops held by the National Disaster Management Centre (NDMC) in order to gain proactive input from industry in the discussion on the Fire Services White Paper. The event took place a day after the tradic collapse of the shopping mall in Tongaat, KwaZulu-Natal.

Mark Te Water, chief fire officer, City of eThekwini, managed to welcome all after having spent all night at the incident.

Moses Khangale, senior manager: fire services coordination, NDMC gave an overview of the fire training

sector and Jurgens Dyssel, manager fire services coordination, NDMC, reviewed the current organisational approaches to fire training in South Africa. Dyssel also presented issues regarding fire training and development after which Previn Govender, chief fire officer, Breede Valley Fire Department, lead an open discussion on the current approaches to fire training. Khanaale said that training must respond to the fire service's needs. A proposal was made for a national training academy. Khangale also said that the objective should be to make training more accessible. He furthermore stated that in terms of medical training there must a clear scope of practice.

Te Water said that there was a huge gap in middle to senior management

"You don't control the media, you

manage the media," said Layne.

He said that a picture speaks a

thousand words and by supplying

the media with photographs, you

also promote the fire service. He

outlined the various types of media

and possible fire safety messages.

Social media is also an excellent form

of communication but answering

comments are restricted due to

cause determination. Erasmus said

that most common fires aren't

the first place. Malicious fires stay

Services'

Rob

on

manpower and time constraints.

Wildfire



The 2013 Fire Services Training and Development Workshop was held in Durban

while the basics were being taken care of.

Khangale summarised the discussions and said that further indepth talks would be held with the training experts and that the document would then be distributed to all departments for comments.



Theo Layne



Rob Erasmus

some examples of the cause and origin of fires and showed that the reported cause differed to that of the investigation ie reported cause stated it was started by homeless people and the investigation showed that fireworks were to blame. He strongly recommended that fire perimeters be checked with a low-cost, digital thermometer to locate possible hidden embers so as to avoid rekindled fires. Erasmus said that the cost of an investigation by trained professionals is a fraction of the cost of suppressing the fire.

Jurgens Dyssel, manager: fire services coordination, NDMC, presented an integrated fire protection model as a strategy for proactive services and explained outcomesbased governance. Dyssel also said that the fire problem



goes wider than lives lost. "The impact on the economy, budget, health, society and politically is unknown," said Dyssel. The fire safety policy must be designed to arrest and reverse the progression to vulnerability through a focussed but flexible approach. Policy strategy will move from being reactive to being proactive and predictive in future. The integrated fire safety model will include research and development,

Jurgens Dyssel

the environment, engineering, education, enforcement, evaluation, monitoring and support to ensure reduction in fire deaths, injuries and property loss. Dyssel said that the proactive alignment of services was imperative to achieve these results. This approach will be incorporated in the White Paper on Fire Services following successful consultation with stakeholders and societies.



City of Johannesburg's Tshepo Makola, gave a brief presentation of the City's Emergency Management Services' strategic shift embarked upon that includes extensive oraanisational improvement initiatives aimed at enabling the department to deliver a service that addresses community needs within the limited resources and allocated budget. He outlined the post-2010 EMS functional framework.

Tshepo Makola

Moses Khangale summarised the discussion over the three-day event and said that even if the White Paper takes a bit longer, the strategy will be in place so you can align your service with it. Khangale said that it will be a guide to work with in the meantime. He outlined the time line and thanked all for their active participation.

Machinery extrication

By Colin Deiner, Chief Director, Disaster Management and Fire Brigade Services, Western Cape Government



It would be a good idea to visit various industrial sights to identify the types of entrapment risks you may face

any fire and rescue services responders have at some point in their careers had to respond to 'person trapped by machinery' incidents. Arms or legs caught in belt driven conveyors, children trapped in washing machines or tumble dryers, fingers trapped in various machines and sharp objects penetrating and impaling victims are just some of the challenges that may confront you over the course of your career. The one thing that you need to appreciate from the get-go is that very few of these incidents are the same. The procedural approach followed by a vehicle extrication plan will not necessarily work here. In many cases you will also find that your traditional rescue equipment might not be the ideal tool of choice and you may have to resort to disassembling the machinery rather than cutting or breaking it.

Preplanning

Planning for responses to machinery extrication callouts are not easy due to the fact that your service will generally not respond to many such incidents. These are, however, the incidents that will test your rescue capability and ingenuity and it all starts at the station and how you plan your rescue team's configuration. Your rescue team's expertise in heavy lifting, cutting operations, machine component disassembly, heavy load stabilisation and securing energised equipment will all need to be addressed if you are going to be effective.

Due to the wide range of incidents your service could respond to and the rarity of such incidents, it would be difficult to plan for specific risks in your response area. It would, however, be a good idea to visit various industrial sights to identify the types of entrapment risks you may face and get your people thinking of the ways they can deal with a specific type of entrapment.

There will, however, always be certain things that you will have to do on any incident and the development of a standard operating procedure (SOP) dealing with issues such as scene safety, electricity isolation, lock-out/ tag-out of machinery and patient care, will be important.

Your equipment needs will have to be thought through carefully. As mentioned earlier, you will need to compliment your standard vehicle extraction suite with an assortment of tools not normally found on most rescue trucks. A good basic equipment suite should include the following:

- Battery operated reciprocating saws, small metal cutting circular saws, impact drills
- Wood and steel wedges
- Lock-out/tag-out equipment.
- Rigging equipment (chains, slings, d-rings, carabiners etc)
- Soap solution
- Pry bars
- Hydraulic rescue tools
- Air chisels
- High-pressure lifting bags
- Ratchet/socket sets
- A good standard toolbox containing an assortment of screwdrivers, wrenches, pliers and hammers



Consider that your rescue operation might take place in a hazardous environment

Also consider that your rescue operation might take place in a environment. hazardous Some years ago, I responded as part of a rescue crew to remove a person who had been overcome by heat in an industrial bread baking oven. This entailed entering an environment at an extremely high temperature. The person might have been overcome by a hazardous material that would require the rescue team to work in breathing apparatus or chemically protective clothing.

First arriving units

The best way to initially approach an extrication in an industrial setting, is to follow the same steps that you would for a vehicle extrication. A five-man rescue squad should divide up into three components: incident commander (one person), medical team (two people) and extrication team (two people). One member of the extrication team should do a quick outer circle survey and identify any prevailing hazards such as moving machinery, spilled liquids and trip hazards. The other member should focus his/her attention toward the trapped victim and assess the level of entrapment, stabilisation challenges and possible entry and exit routes. The senior medical team member should try to establish contact with the patient and try to ascertain the medical condition of the patient, possible injuries and level of consciousness. Also remember that no one should touch the victim until it is confirmed that it is safe to do so. Once the initial survey is complete a representative of each group should report back to the incident commander who will then decide on his/her incident action plan.

It may be necessary at this point to call in the services of an onsite technician to isolate any energised machinery or isolate any flowing or leaking liquid processes. Remember that when you do ask such a person to work near the victim, that it could cause unnecessary trauma to that person if they are exposed to the victim's injuries or know the victim.

The kind of expertise you might need would be equipment operators,

maintenance personnel or even the equipment manufacturer. If you are unsure as to how to approach a specific type of machinery or equipment, rather be safe and call in the services of one of these experts.

Although the primary power source, in most cases, will be electrical, you could also encounter hydraulic sources such as fluids under pressure, pneumatic sources such as compressed air, stored energy in springs or potential energy from suspended parts. Suffice to say that all these sources must be shut down and isolated before any rescue work can be started. Your confined space rescue lock-out/tag-out procedures can be employed here. Once all energy sources have been isolated make sure that they remain so until the mission is completed.

It could be possible that the machinery component or equipment that was involved in the accident could have become unstable during the accident and that it might be necessary for it to be stabilised. Ensure that you have sufficient cribbing and **>**

Machinery extrication



These incidents will test your rescue capability and ingenuity



Disassembly requires the removal of the obstructing components around the trapped body parts and is the most common approach

shoring equipment for this task. Due to the height and disposition of the load it might be necessary for rigging from above or around the load. Again, here a standard rescue unit might not have the kind of equipment needed for this task and if this is the case, make sure beforehand that contingencies are in place for such a situation.

After completion of the isolation and stabilisation of the load, it is advisable to do a re-evaluation of the scene. It might, at this point, be possible to release the victim or you might discover a further problem that did not present at your initial survey.

The rescue can only be started once a zero mechanical state is achieved. This means that no machinery is running, the load is stabilised and all energy to the site is isolated.

The rescue

The incident commander must consider four critical factors before commencing with the extrication:

- 1. Time: This will be largely dictated by the condition of the patient and the complexity of the extrication required. Other factors such as daylight, if relevant, must also be considered.
- 2. Victim: What is the condition of the victim and to what extent can he/ she be medically stabilised while trapped.
- **3. Rescuer:** Are the rescuers sufficient in numbers and ability to extricate the victim within the given time.
- **4. Machinery:** Is it possible to disassemble the machinery to the point where the victim can be removed.

Once the incident commander is satisfied that the above challenges can be addressed he/she needs to consider one of the following methods of extrication:

- 1. Manipulation
- 2. Disassembly
- 3. Breaking and breeching

Manipulation is generally the simplest and quickest way of releasing the victim and can be achieved by manipulating the trapped body part around a machine component until it is released. It could also involve the movement of the component out of the way of the body part. Manipulation is obviously limited to the degree of entrapment. A handy tip here is to have a bottle of lubricant available that can be applied between the trapped body part and the machine, which could create a slippery surface and ease the movement required.

Disassembly requires the removal of the obstructing components around the trapped body parts and is the most common approach. Special equipment and the presence of an expert on the particular machinery may be required for this task.

In some very rare cases it has not been possible to remove the victim from the entrapment and it has become necessary to consider other options. One such an option is to examine the possibility of removing only the component of machinery in which the person is trapped and move the victim to hospital still attached to this smaller component. It must be clear that this component will be able to be transported and that the receiving medical facility will be comfortable to conduct an operation of this complexity.

Amputation of a trapped limb will be the absolute last resort and will almost never be advisable. The risk of infection in an industrial space will always be present and the challenge of preparing the site for such an operation will be almost impossible.

Breaking and breeching means the physical damaging of the machinery to remove the victim. This should be seen as a last resort as it will require possible cutting and metal relocation under force and close to the victim. All precautions employed during a vehicle extrication evolution such as placing hard protection between the rescue tool and victim should be exercised.

Make sure that you have enough high-pressure airbags that can be placed in confined spaces and at the same time provide sufficient force to extricate the victim. (The use of highpressure airbags is comprehensively dealt with in Volume 2, No 7 of Fire and Rescue International).

Whichever method of breaking and breeching is decided on, it should be done with great precision and any relocation of loads should be just enough to remove the entrapped limb from beneath it.

Remember that any major relocation of metal on one side on a load could cause it to become unstable somewhere else. Stabilisation should be an ongoing task and ensure that you are continuously monitoring the

Msukaligwa Fire and Rescue Service

The Msukaligwa Fire Service looks after an area spanning 6 016 square kilometres

he Msukaligwa Fire and Rescue Service in Mpumalanga Province, South Africa, is responsible for a vast area spanning 6 016 square kilometres that includes seven towns, with Ermelo and its surrounds being the most populous.

Ermelo Fire Department was established in 1975 and only served Ermelo town leading up to 2001, when the amalgamation of previous councils resulted in the formation of the Msukaligwa Municipality.

load for any problems that may arise. While the victim is being removed, a medical area should be set up in a safe area in close proximity to the entrapment site. All stabilisation and patient packaging equipment should be prepared and necessary arrangements for rapid extrication put in place.

Incident termination

Before your rescue team can start handing out high-fives for another successful rescue, you need to make sure that the scene has returned to normal.Allequipmentmustberetrieved safely. You might be requested by an accident inspector to leave certain equipment in place to enable them to conduct their investigation of the The Msukaligwa Fire and Rescue Service chief fire officer (CFO), Jaco Johnstone, took up the reigns of CFO in August 2006, followed a two-year period in which the post was left vacant by the departure of then CFO, Ferdie Fourie, in 2004.

Ermelo's first official CFO was, Anton Muller, who was appointed in 1995, which is 43 years after the appointment of Ermelo's first traffic officer and fire chief, George Heide, in 1952.

accident. Equipment that cannot be safely removed might have to be left in its place until such time as it can be removed by some other means.

Only once all equipment has been removed and the site has been restored to normality can the incident be declared over and the site be handed over to the person with the designated authority. This might be an accident investigator, the site foreman or even the police.

Because you won't be responding to 'person trapped by machinery' incidents often, it is good practice to have a technical debrief immediately after termination of the incident. This Until 1919, the then South African Police (SAP) was responsible for extinguishing fires. Many years later, in 1970, the Ermelo council decided to house the traffic, fire and license section in an old building of the power station in the town.

Fire Service

Ermelo's fire station then moved into the Paratus Centre, which was a more modern building in 1975 and one that was shared with other municipal services including traffic, license sections, a vehicle testing station and a weigh bridge.

way all responders can have a firsthand idea of the various tasks and how they were carried out.

In closing

Machinery extrications will in most cases only involve one victim. This comes as a relief when you realise that it might also be among the most taxing incidents that you may ever have to handle. It's not easy to train for them because of the varying types of incidents you may encounter. This should not stop us from continuously looking for new equipment and methods to address these challenges.

Remember: It's not the winning, it's the taking apart.▲



CFO, Jaco Johnstone

► Today, the building still houses the Msukaligwa Fire and Rescue Service, the traffic and licencing department, as well as the local disaster management unit.

Fire and Rescue International visited the Paratus Centre in Ermelo in the Msukaligwa Municipality, where CFO Johnstone provided us a with a tour of the facility and its fire resources.

Johnstone says that there have been many developments in the fire service since 1975. He says that the municipality has since built two 24hour fire stations that are operated by 26 professional fire fighters, as well as 23 wildland fire fighters, courtesy of the Working on Fire (WoF) integrated fire management programme.

Four more fire stations are planned for this area in the future, reports Johnstone. He says that planning is underway for the build of a third station in the town of Lothair. The new station will be designed for the wildland and urban interface.

The Msukaligwa Municipality will look to service the remaining outer lying towns of the region's seven towns that include Davel, Chrissiesmeer, Ngunga and Sheepmoor.

Fire history

The first fire reported in Ermelo was in July 1889, when the house of the town magistrate was damaged during a fire, mentions Johnstone.

Two years later, British soldiers burnt down the whole town, with the



Gawie Nel

exception of the Dutch Reform Church and one residential dwelling in one of the more significant periods in Ermelo's history.

Following a notice given by the South Africa Police in 1919 that it would no longer extinguish fires, the town council decided to invest in a mechanical driven fire truck, replacing the horse-drawn steam-fire appliance of old.

Soon after the Ermelo Fire Service moved into the Paratus Centre in 1975, it was put to the test when a fire broke out in the Metro Wholesale building. Although the fire service responded to the scene in good time, the fire spread rapidly due to the building construction and it was totally destroyed.

A month later, on Sunday 16 May 1976, another fire broke out when a freight train accidentally landed on the wrong track and collided with a petrol rail tanker. Once again, the fire service was on the scene quickly to prevent the fire from spreading to 33 other petrol rail tankers, which were standing in close proximity to the incident.

More recently, the fire service suffered two fatalities in 1999 in a railway fire incident.

Johnstone says that four railway petrol tankers collided with two burning and another exploding, causing the death of two Ermelo fire fighters. These have been the only fatalities suffered by the fire service since 1975.



Johan Oberholzer

Risk profile

The Msukaligwa Municipality is situated on the eastern high veld of Mpumalanga and owing to the geographical location, approximately 80 percent of the area consists of veld and plantation areas, which in the winter can easily change into a fire inferno, explains Johnstone.

He says that the municipality's area of jurisdiction is marked for its denselypopulated informal settlements, with no infrastructure.

Johnstone says that rapid development in Ermelo is bringing more shopping complexes that are once more accompanied by other types of risks. A three-storey mall has been proposed for Ermelo and set to be built in the near future.

Another fire risk in the region is the major railway line that crosses through the jurisdiction area of the fire and rescue service. The railway lines are used to transport hazardous products from the Sasol refinery in Secunda to the Richards Bay harbour in Kwazulu-Natal (KZN).

Johnstone says that the N2 is the busiest road route in the municipality for freight of hazardous chemicals leading to Richards Bay.

"We have five major routes leading into towns," mentions Johnston. He adds, "We have 50 percent product on the road and 50 percent on rail."

The municipality's fire service, with its seven towns, various hazardous installations and vast area, has been **>**

Fire Service



Msukaligwa Fire Station #1 demonstrating the hose line fire attack



The fire engine fleet at Msukaligwa Fire Station #1 based in Ermelo



Ermelo's station officer demonstrating the remotely controlled water pump feature of the Pierce fire engine



The Pierce fire truck is configured with an emphasis on fire fighter safety



Msukaligwa's refurbished 1983 Mercedes Benz Unimog



The wildland fire fighting engine at Msukaligwa Fire Station #2



Msukalikgwa Municipality's central call centre personnel



"Plans had to be put in place to purchase additional fire trucks, equipment had to be upgraded," he says.

Johnstone says that within four years, the fire and rescue service changed from a conservative fire fighting-only service to a fire and rescue service that is prepared to deal with any emergency incident.

"During this exercise we learnt how to tap in to funding from provincial governmental sector department. Funding from the municipal infrastructure grant (MIG) secured the opening of a brand new fire station in Breyten serving the northern area of the municipality. This was another goal reached, bringing fire and rescue service closer to the community," states Johnstone.

Operations

"The key objective of the function is to ensure that the fire and rescue service is always prepared to provide a 24-hour, uninterrupted fire and rescue response to all members of the community," says Johnstone.

A central call centre at the Msukaligwa Station 1 in Ermelois the communication medium for all emergencies in the region, incorporating traffic, fire services and the disaster management centre (DMC).

Johnstone says that the fire service responds to an average of eight to nine shack fires every month. Shack fires, along with wildfires make up the majority of calls received and attended by the service and this has been the case over many years, says Johnstone.

Msukaligwa Fire and Rescue Service operational functions:

- Fire suppression
- Technical rescue
- Hazardous materials
- Urban search and rescue
- Operational risk familiarisation
- Public fire education
- Disaster response

Currently, Msukaligwa's fire department is the only fire service with a swift water unit and hazmat capabilities in the Gert Sibande Municipality, which is one of three major districts in Mpumalanga Province.

Johnstone says that the fire service also provides aerial fire fighting support to local farmers. "The aerial resources consist of a spotter aeroplane and a helicopter that can drop a bucket of 500-litre water at a time."

During the winter of 2013, millions of Rand's worth of property was protected by the aerial support alone. Johnstone says aerial support is the one specialist service that is outsourced by the fire and rescue service and is provided by FFA Aviation.

A WoF team, consisting of 23 wildland fire fighters, based at the Msukaligwa station 1 base in Ermelo, assists farmers in making firebreaks, while also assisting with fire suppression in wildfire incidents. Johnstone says that the service is looking to add a permanent complement of wildland fire fighters to its personnel.

Organisational structure

Richards Bay in one of the major fire risks in the municipality

The current organisational structure of the Msukaligwa Fire and Rescue Service constitutes the CFO at the apex of the service.

Msukaligwa Fire and Rescue Service station officer, Johan Oberholzer, follows the CFO in the chain of command. The service has two platoon commanders namely, Gawie Nel and Lucky Soko, who lead a team of senior, junior and learner fire fighters at the fire service.

The Msukaligwa Municipality currently follows a strict level of skills and qualifications required per rank structure. "All our staff is trained in fire and rescue. Fire service personnel also received random training to enhance their skills. On any one shift you will found two or more personnel trained in a speciality field; either hazmat, swift-water rescue, law enforcement or fire prevention," notes Johnstone.

Msukaligwa's female fire fighter complement makes up 22 percent of the total fire fighter personnel at the fire service. "I believe this figure will drastically increase in the following year," anticipates Johnstone.

He says that there is a currently a huge vacancy rate in the fire and rescue service. "This is due to financial constraints. However, the current staff compliment is well trained, disciplined and competent.">





Msukaligwa Fire Station #2 in Breyten, Mpumalanga



Fire fighter duo based at Msukalikgwa Fire Station #2 in Breyten, Mpumalanga

Equipment

The municipality has acquired a fleet of modern and well equipped vehicles that includes an imported major pumper, reports Johnstone.

The fleet of vehicles available to the fire service includes a Pierce major pumper for structural fire fighting functions, as well as a GMC rescue pumper that also serves a structural fire function.

The Pierce major pumper, delivered to the station in 2011, has a 3 800 litre water capacity, with a 4 700 litre per minute (8-bar) and 7 300 litre per minute (10-bar) output capability.

"In choosing the pumper, we considered all applications, but safety for fire fighters was the priority," says Johnstone. He says that the cab of the Pierce ultimate configuration (PUC) pumper is spacious, owing to the configuration of the onboard pump and appliances, enabling great fire fighter safety.

Other fire engines at the service include a Mercedes Benz Unimog for wildland fire fighting and a Mercedes Benz major pumper with 6 000 litre water carrying capacity.

The aerial units employed by the municipality include a Cessna spotter and one aerial water bomber.

There is one fire engine that is coveted by Johnstone and that is the Scania Bronto Skylift hydraulic platform, which is currently not in the municipality's fleet. "Based on current and future developments planned in and around Ermelo, there will be a need very soon for a hydraulic platform," he says. "A Bronto 37-metre hydraulic platform would be the appropriate vehicle for these new structures springing up in Ermelo."

A Pierce Hawk wildland and urban interface fire engine would be another vehicle that would be welcomed by the service to assist with challenging wildfires experienced in Msukaligwa.

Training

The closest approved fire training centre for career fire fighters is situated at SASOL Secunda in Mpumalanga, notes Johnstone.

"Due to a good work relationship with SASOL Fire and Emergency Services, our fire fighters received training at their centre. In-house training is provided randomly by our own qualified fire service instructors," says Johnson.

He says that every fire fighter at the Msukaligwa fire service is required to undergo a minimum of forty in-house training hours per month.

"In 2009, we hosted an emergency services learnership program for 11 unemployed youths. Approval was given to run the program again in 2014 with 10 more candidates," states Johnstone.

He mentions that fire training is currently provided by the municipality's fire service to the public and this includes basic fire fighting and fire marshalling programmes.

Fire safety

The fire and rescue service renders life safety programmes in order to make meaningful contributions to the livelihood and sustainable existence of communities, states Johnstone.

These programmes include public fire education through scheduled awareness programs at public events, as well as scholar education by means of planned and scheduled visits to schools, interacting with children from preprimary to secondary school level.

Other fire and life safety programmes provided by the service are the industry and commerce emergency readiness training that involves frequent participation in emergency evacuation drills with businesses of all kinds.

Johnstone says that there is also a community based fire awareness training programme offered by the service, which provides basic wild land fire fighting techniques to farmers and their employees. "It also empowers upcoming farmers through basic knowledge of fire breaks and basic land protection," he says.

The safety challenges faced by the fire service include the numerous substandard buildings built in the six smaller towns of the municipality. "We had to convince the noncompliant owners of safety requirements, which they were never aware of," says Johnstone.

Another challenge faced by the service is the enforcement of the National Veld and Forest Act.►

Fire Service



Working on Fire team leader, Nomvula Malaza

Msukaligwa Fire and Rescue Services Response vehicles:

Station 1

- 1 x Pierce PUC major pumper for structural fire fighting
- 1 x GMC Top-Lick rescue pumper structural fire fighting
- 1 x Mercedes Benz Unimog for Wildland structural fire fighting
- 1 x Mercedes Benz major pumper for structural fire fighting and 6 000 litres water carrying capacity
- 1 x Mazda double-cab as a rescue vehicle
- 1 x Nissan 4x4 for wildland fire fighting
- 1 x Nissan hazardous material and special operations carrier
- 1 x Hazardous material trailer
- 1 x Cessna aeroplane spotter for wildland fire fighting (FFA Aviation)
- 1 x Huey helicopter, aerial fire fighting bomber for wildland fire fighting (FFA Aviation)

Station 2

- 1 x TATA 4x4 light pump for structural/ wildfire and rescue application
- 1 x Unicab 5 000 litres water tanker, wildland fire fighting and water carrying capacity



A 23-member Working on Fire team based in the Msukaligwa Municipality

Johnstone says that the municipality has undertaken awareness and regulatory activities that include law enforcement, investigations and advising landowners in rural areas.

Interagency workings

The Msukaligwa Fire and Rescue Service has a close working relationship with the local disaster management centre (DMC), which is also situated on the premises of the fire station.

The service also has a working relationship with the district and provincial DMCs, says Johnstone.

The fire service has formed a working relationship with the two FPAs operating within the municipality namely Msukaligwa FPA and the Umpiluzi FPA.

"We formed a very close working relationship that had proven to close the gap between the municipality and the FPAs that existed before my time," explains Johnstone.

The fire service has also fostered a good relationship with landowners, 250 of whom are members of the FPA's.

As per the National Veld and Forest Fire Act, Johnstone has been appointed as the fire protection officer (FPO) for the region.

Challenges

"The basic expectation of the public is that when they have an emergency and call the fire and rescue service, that someone with adequate training, experience and equipment will arrive within a reasonable amount of time and solve the situation," states Johnstone.

"Unfortunately, whilst the areas closest to the two fire stations are benefiting, there are still areas where the attendance time exceeds the national norm," he says.

The lack of investment into the fire services and the rapid urban sprawl and development growth of the area is a major concern, says Johnstone. "However, due to an increase in the activities related to fire prevention and fire education in all towns there is a greater appreciation from the community at large."

Access to informal settlements around townships and the lack of water supply to those areas pose a great challenge to the abilities of the fire service to improvise in responding to fire incidents.

To mitigate the challenges and keep abreast with the industry, the Msukaligwa Fire and Rescue Service is currently actively involved with district, provincial and national seminars, workshop and conferences held regarding the fire industry.

Johnstone says that being knowledgeable with the legislation relevant to the service are key to a fire station running soundly and successfully. "Make sure your team is well trained and disciplined," he encourages.

First generation fire fighter climbs ladder to role as fire chief

n experience with a shop fire and the subsequent response to the scene by fire fighters was enough to win over the heart of Msukaligwa Fire and Rescue Service chief fire officer, Jaco Johnstone, to the fire service when he was a little boy.

Johnston was only six years old after spotting his first fire from his dad's car. "My dad and I were returning home one evening in Standerton when I drew my dad's attention to a large shop that was on fire. My dad immediately contacted the fire department and they arrived within a few minutes. Ever since then, it was my dream to be a fire fighter and helping people out in whatever way I could," says Johnstone.

After 29 years of being in the fire service, Johnston remains an impassioned fire fighter, as adjudged from Fire and Rescue International's recent trip to Ermelo, where he granted us a tour of the town and its fire service resources and infrastructure.

After a period when the fire and rescue service in the region was mismanaged and ineffective, Msukaligwa Fire and Rescue Service has regained the faith of the community, including landowners, under the leadership of Johnstone, who was appointed as the municipality's CFO in 2006.

"Since my appointment as the chief fire officer for Msukaligwa Fire and Rescue Service, I observed an offensive attitude towards us as fire fighters and the fire and rescue services in our province," says Johnstone.

He has since become proactive in representing the service in various forums including, the South African Emergency Services Institute (SAESI) for Mpumalanga, the Msukaligwa and Umpiluzi Fire Protection Associations (FPAs) and the Mpumalanga Umbrella Fire Protection Association (UFPA).



CFO, Jaco Johnstone

Johnstone has managed to consolidate all the fire industry role players in the municipality as its fire chief and fire protection officer (FPO) since 2006. He says that his close working relationship with every stakeholder in the fire industry, as well as the support of his wife, Elize Johnstone, has defined his success and impact on his community and the fire service in Msukaligwa.

As the regions CFO, he is now tasked with expanding fire and rescue service with the build of four additional fire stations in the municipality, beginning with the imminent build of a station in Lothair situated northeast of Ermelo.

First generation

Johnstone says that while members of his family have been in public service, he is the first generation fire fighter. He says that being a CFO role was an ambition he held from the first day he began his duties as a part-time fire in 1985 as a 16-year old.

However, Johnstone spent two years with the South African Police (SAP) after matriculating in 1987. His brief stint in the SAP saw him return to the fire service when he was appointed as the fire fighter and protection services officer at Hendrina Town Council, in Mpumalanga in 1989. This was followed by an appointment as chief protection services at Breyten Town Council in Mpumalanga in 1995.

"I am fortunate to be the first generation fire fighter in our family," says Johnstone. He drew inspiration and guidance from different senior fire personnel in his time as a junior fire fighter. These mentors included the ex-fire chief of Secunda Fire Department, D SteenKamp, who 'personified the perfect chief fire officer', says Johnstone.

"He taught me discipline and dedication," he says. After returning to the fire service as a full time fire fighter in 2006, Johnston says that the Steve Tshwete Local Fire and Rescue Service fire chief, G Stoltz, nencouraged him to stand up for career firefighters in Mpumalanga.

Leading the charge

Johnstone believes in a democratic management style, allowing employees to take part in decisionmaking, saying that 'everything is agreed upon by the majority'.

"The communication is extensive in both directions, from employees to leaders. I have found this style can be particularly useful when complex decisions need to be made that require a range of specialist skills," explains Johnstone.

He says that by applying this approach impacts on the 'point of view' or perspective of fire fighters to the service and the quality of work and job satisfaction improved as well.

Chief Johnstone encourages future fire chiefs to remain focused despite the trials that may lie ahead. "Keep your passion alive. There is nothing life a fire fighters job well done," he says.

His message to fellow CFOs; "If you thought it was hard getting into the job, wait until you have to hang the 'fire gear' up and walk away".

What can you do if you suspect that illegal wildfires are occurring in your area?

By Rob Erasmus, Enviro Wildfire Services



Do not collect any items found at the fire scene. Coins may have fingerprints that can link a suspect to the fire scene

n South Africa and other parts of the world that are wildfire-prone, incidents happen where people purposely and maliciously set fire to veld and forests for a variety of reasons, including financial gain, revenge, to hide an existing crime, vandalism and to a lesser degree, mental illness. These criminals, (and yes, we use the 'criminals' as it is an offence in South Africa to set veld alight without permission), cost the economy thousands, if not millions of Rands each year in fire fighting, legal and medical insurance, expenses.

We know that very few wildfires are investigated and requests for such investigations usually originate from appointed attorneys and insurance companies attempting to recover costs. But what about fires that cause no monetary damage as such (general roadside fires that burn hectares of natural veld) but still require resources to extinguish them and in many cases, the costs of such operations are borne by the landowners who will in turn claim from his/her insurance if they have such.

There seems to be a general apathy amongst landowners and organisations to determine the true cause of wildfires and the majority are guite content to lay the blame on the cigarette smoker who has tossed a burning cigarette butt from their moving car. As we have mentioned before, while cigarettes can and do start roadside wildfires, there is strong evidence to indicate that few roadside fires are, in fact, started in this manner. Field tests undertaken to date with fine fuels (grass) in hot, dry and windy conditions with a wide range of ciagrette brands and types, have yielded little ignition success. This has further supported our hypothesis that many of the wildfires that occur along our roadsides are being set maliciously, and are not as a result of accidental negligence.

The two primary reasons for the lack of wildfire investigations by landowners and managers are firstly

because they believe that it was a cigarette and secondly because they do not know who to contact or how to go about implementing such an investigation. Many local South African Police Service (SAPS) stations and fire departments openly admit that they do not have suitably trained staff to undertake such specialised investigations. First-hand experience in well organised areas such as Cape Town, have proven that the SAPS will only get involved if the fire has been investigated by an investigator and it has been proven to have been malicious. The vicious circle is that they will not become involved until it has been investigated and they are not prepared, or do not have the ability, to undertake the investigation. So, even if a landowner wants the fire investigated by the local SAPS so as to have a case registered, they will be unsuccessful in their attempt.

Likewise, very few local fire departments will implement an investigation and it is usually only when someone has been badly injured or killed, or maybe if serious damage occurs to property, will an investigation be implemented.

Bearing in mind that there is strong evidence to indicate that there are people who regularly set fire to the veld and that very few of their fires are investigated, such criminals will continue with their selfish acts unchecked and without fear of being apprehended. Put quite simply, unless the landowner/ manager/responsible agency starts to implement wildfire investigations to accurately document and collect evidence, these wildfires will continue unchecked. The implications of such freedom being given to the criminal element are deeply concerning.

With this as a foundation, what are the options for the landowner if they suspect that the fire(s) has been set intentionally? Before we address that question, how would the landowner determine a suspicious fire? We know that natural fires ie lighting, rock falls, etc occur, as do accidental (sparks from equipment used for cutting and grinding) and negligent ones ie homeless people living on the urban edge, fireworks. However, when the fires are occurring at remote locations, on days with high humidity, repeat locations, or when an object **>**



Bottles or broken glass may contain traces of accelerants such as petrol or paraffin

is found near the origin (and we shall discuss this shortly), to name but a very few, the owner or first responders should request that a preliminary investigation be undertaken.

Such investigations are not expensive and can be completed within an hour. In the Western Cape groups such as Enviro Wildfire Services are willing when available to respond immediately to investigate a fire, preferably even while it is still burning, to gather critically important information before it is damaged by fire fighters, the weather, the general public and believe it or not, by the criminals returning to collect any evidence they have left behind.

Protecting the general origin is crucially important and knowledge of fire spread and shape will assist first and second responders in identifying the general area where the fire started. This area is usually of low fire threat after the first 20 minutes due to the fire having already having moved on. Fire chiefs are urged to brief their staff on the importance of protecting such origins if they suspect the fire to be malicious. Once again, Enviro Wildfire Services would be more than willing to visit fire stations throughout the Western Cape and possibly beyond to provide a one hour wildfire origin and cause presentation to local fire fighters at their own stations, should we receive the invitation.

Herewith some basic steps if a veldfire is suspected of being malicious:

- 1. Protect the general origin (where the fire started) from damage by fire fighters, the public, vehicles, or criminals
- 2. DO NOT COLLECT ANY ITEMS FOUND IN THIS AREA. Any collection or handling of possible evidence will be useless in a court of law unless it has been properly documented and collected by a qualified investigator.
- 3. If possible, use barrier tape to demarcate the area and place a fire fighter there to control or prevent access to the site.
- 4. Contact the local SAPS to determine if they have suitably trained, qualified and experienced

Wildfire investigation Part 3

staff to undertake an investigation. If not, contact the local fire chief to determine if they have suitably trained, qualified and experienced staff to undertake an investigation. If not, contact a suitably trained, qualified and experienced fire investigator and request them undertake a preliminary to investigation. Bear in mind that there might be costs involved. In the Western Cape, Enviro Wildfire Services would be willing to provide this service and in most cases there would be no charge.

Following the outcome of the preliminary investigation, it can be decided if a more thorough investigation is required ie interviews, aerial photographs, larger area investigated, security camera footage studied, etc.

With the aim of this series of articles being to both increase awareness investigations about fire and hopefully to proactively encourage landowners and agencies to implement such undertakings, we hope that enough evidence and data will be collected to one day apprehend and successfully convict those people that selfishly set the veld alight with no regard for the safety of those who are tasked with fighting such fires, often at great risk and cost.

In the next article we will discuss how to go about setting up a multiagency task team should a serial fire setter be active in your area.

For more information on undertaking veldfire investigations, or requests to provide presentations to your fire fighting staff, please contact Rob Erasmus at enviro@absamail.co.za



Where possible, use barrier tape to cordon off the general origin of the fire to prevent damage to evidence

ATA International filling gap in EMS training in Africa



ATA International Training operational personnel

TA International Training, which specialises in emergency and occupational health and safety programmes, has solidified its evergrowing footprint in Africa after six years of operations from its base in Bedfordview in Johannesburg, South Africa.

The training organisation provides cross-border training across the continent to multinationals and State departments. Its core focus is to equip medical and health and safety professionals with internationally certified courses that are pertinent to compliance with in-country health and safety regulations.

"We have a fair footprint," says ATA director Trevor Justus, who discussed the organisations projects and course offerings with Fire and Rescue International.

Justus says that emergency rescue training (ERT) forms the core training offered to an array of countries that includes Zambia, Nigeria, Mozambique and Ghana.

The ERT courses offered by ATA include trench rescue, industrial fire

fighting, confined space and search and recovery. "What we do is select training programmes and offer these to corporations in three key industries namely oil and gas, mining and the Defence Force," states Justus.

He says that onsite cross-border training is offered to clients who also have the option of bringing delegates to South Africa. Here they have access to an EMS training academy or hospital environment to gain practical training.

Justus explains, "We would have emergency medical doctors and nurses undertake advanced cardiovascular life support or (ACLS) and/or advanced trauma life support (ATLS) and then they would have in hospital trauma training."

He says, "They will work on road with Netcare 911 and then work at the Charlotte Maxeke Johannesburg Academic Hospital and work in Trauma or ICU. They then go back to their countries and take up positions there."

ATA makes use of the University of the Witwatersrand's (Wits) ATLS training programme for those African clients who prefer to send delegates to South Africa for training programmes. "We have first world teaching facilities and that is why they come to South Africa," he says.

He adds, "Our African learners, when they come over and realise that they are receiving the latest training of international standard they have an unbelievable desire and thirst for knowledge."

New training academy

Justus says that ATA started its own Advanced Life Support Training Academy in May last year.

organisation offers The various internationally accredited FMS short-courses including basic life support (BLS), international trauma life support (ITLS, **Paediatrics** Advanced Life Support (PALS) and advanced cardiovascular life support (ACLS).

The training academy is based in Fourways in Johannesburg, South Africa and is designed for doctors, paramedics and nurses. The courses offered are accredited by the Resuscitation Council of Southern Africa, which in turn is



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Training

 accredited with the American Heart Association (AHA).

"For our ITLS we are accredited with the ITLS Southern Africa Chapter," states Justus. He says that the programmes are designed for those who are looking to equip themselves with current and latest best practice in EMS, while at the same time earning continuous professional development (CPD) points.

"The training provides the latest up-to-date treatment and training programmes. Treatment of cardiopulmonary resuscitation (CPR) changes all the time and with this course you are given the latest best practice for treatment of patients," says Justus.

ATA's Advanced Life Support Training Academy is coordinated by ATA International Training coordinator, Gugulethu More. Other operational staff at ATA include ATA International Training senior coordinator, Tasneem Bowles and ATA International operations administrator, Suraya Brown, ATA International office support and training administrator, Melissa Tilma and ATA International operations and training manager, Janine Arendze.

There for life

"Our company tagline is 'There for life'," states Justus. "We know we are making a difference. If a doctor comes down from Africa we change their life, they change their patients life and ultimately their families lives," he says.

A former paramedic himself, Justus knows the value and understands the need for trauma and life support professionals in Africa, where many regions do not have EMS and minimal training in CPR.

To this end, ATA provides a muchneeded service and fills a gap in emergency medical services for various clients that include national departments of health and multinational mining and oil and gas corporations operating in Africa.

"We are biggest in Africa in what we do. We are dedicated in training offerings for African clients. We took this concept and made it work for purposes," says Justus.



Trevor Justus

Crossborder projects

In one of the more significant and current crossborder projects undertaken by ATA, the Nigerian Government recruited 50 students to undergo various training programmes as part of the country's Nigeria Delta Amnesty Programme, whereby militants in the Niger Delta are disarmed and rehabilitated with a stipend and job training.

Justus says that the federal Government of Nigeria contracted ATA to do training in EMS, occupational health and safety and commercial diving. "The Government invested in developing skills and they know that they are going to make a contribution to communities and the country."

ATA was also recently contracted by mining stable, AngloGold Ashanti's West African operations in Mali, to do ERT training for its personnel. This included high angle rescue, confined space, pump operator training and hazmat.

ATA also recently provided EMS training for the Defence Force and the Ministry of Health and Social Services in Namibia and in February this year, the organisation was contracted to do advanced life support training for the Botswana Department of Health.

"In terms of fire courses we offer, we do more industrial fire fighter programmes, particularly for mines," mentions Justus. He says that mining houses have to manage onsite fires internally, as opposed to calling out for an external fire service and brigade.

"Mines in Africa have to be selfsufficient, competent and capable. For Anglo Gold Ashanti in Mali, we recently provided training in preliminary industrial fire fighting," says Justus.

Word of mouth

In developing an extensive African footprint over the past six years since its formation, ATA attributes this success to providing a quality service that is now bearing fruits.

He says that those who have taken up the training programmes provided by ATA have spread the word and this has generated interest from other organisations in Africa.

"It is a process of being proactive and reactive in terms of marketing. It is about quality and that is what we have been focused on doing for the past six years," states Justus.

Challenges

"There are two key challenges in our operations," mentions Justus. "The first is language."

Justus explains, "You will see from the map of African starting from the DRC towards central Africa up to the north you find mostly French speaking countries. In Mozambique and other regions in sub-Saharan African you find Portuguese speaking countries."

He says that it a challenge going up to the French and Portuguese countries in Africa where the language barrier makes training difficult and it is similarly a challenge for African delegates coming to South Africa, where they are required to communicate and learn in English.

Another challenge for the organisation is the lengthy processes required within various corporate and governmental structures to approve funding for training programmes. "Nothing happenings quickly," says Justus. "It takes time, which is just corporate processes and procedures," he says.

Justus is, however, positive about the outlook of the organisation. "The future is very promising. We tell staff we are here for life," he says.▲

Emergency medical services

HEMS, another link in the emergency response chain

LIBER

Helivac provides aviation-trained doctors as part of its membership-based EMS service

elivac Medical Services, based in Meyersdal in Johannesburg, South Africa, has developed a onestop service emergency medical service (EMS) offering for accident or trauma victims in a membershipbased service.

An around-the-clock EMS service is provided by Helivac through its countrywide network of ambulances, medical evacuation helicopters and experienced medical teams. The service offering includes a roadside assistance programme, paramedics and advanced medical equipment.

In addition, the organisation has also set up an emergency medical call centre to provide a comprehensive EMS service as part of its membershipbased business model.

In its infancy, Helivac was created to fill a gap in emergency air rescue segment of South Africa's emergency services and provide an offering that was not duplicated by any other medical services organisation in South Africa.

The principle goal and focus of Helivac is to reduce EMS response

times and ultimately save lives, says Helivac managing director, Kelly Lockyer.

Helivac founder, Jean-Pierre van Tonder, says that Helivac's offering is more holistic as the organisation works with the closest emergency service providers to a specific incident, as opposed to working exclusively with specific organisations.

"Our focus is on reducing time and hence saving lives. It all comes down to the 'golden hour' between life and death," states Van Tonder.

Helicopter EMS

Van Tonder says that access to a countrywide network of ambulances, medical evacuation helicopters and highly experienced medical teams has enabled the organisation to be at the forefront of EMS service delivery.

"We have made flight criteria very transparent and available to our members," he says.

Lockyer says that Helivac has put the power back into the paramedic's hands. "He is now confident that he can stabilise someone's life, instead of having a phone in one hand motivating why someone must be flown," she says.

Helivac has access to 14 helicopters for helicopter EMS (HEMS) functions in the country.

Lockyer says that with the resources available, there is a disparity with the amount of people that are airlifted versus the amount of people that should be airlifted.

"The reason for this is that the HEMS service offers no guaranteed cost coverage for flights. This is where Helivac comes into play," says Lockyer.

She says that Helivac was started due to the history of helicopter medical companies not being able to withstand the economy based on the models being used. "They would invoice on use. However, by having the prepaid memberships in place, this was avoided," explains Lockyer.

She adds that in response to the needs of the farming industry and the criminal attacks on farmlands, Helivac Protect, was started as another division within the



Kelly Lockyer

organisation. "There is not easy access to farms and communication with neighbours is not there. It is easy to rob farmers and do horrible things," she says.

Helivac Protect was launched offering dedicated 24-hour helicopter assistance with security and medical equipment.

Helivac Protect makes use of aircraft and nationwide ambulance, paramedics and advanced armed security personnel on call. Trauma counselling services are also made available to members when required, says Lockyer.

She mentions that Helivac Protect was involved in the highly publicised farmworker strike that took place in the Western Cape in 2012-2013. "Helivac had several helicopters in the Ceres and De Doorns area for a couple of months as part of its Helivac Protect division," states Lockyer.

She says that Helivac was 'very active' in De Doorns with the strikes in Western Cape. "This is where Helivac Protect was effective," states Lockyer.

Membership

Helivac provides a range of services to the public via a membership based system.

"The members only ever pay a membership fee," says Lockyer. "We are really coordinators and dispatch in the event of an emergency for our members and we cover the costs involved."

Helivac members update their personal details via Helivac Assist online, enabling an up-to-date database of all its members. Lockyer says, "This information is pertinent in an emergency. Our Emergency Case Worker gives this information to the paramedic before they even start stabilising a patient."

All emergency calls are received from Helivac's 24-hour medical call centre in Meyersdal. This service was outsourced to external call centres up until a few months ago, mentions Lockyer.

She says, "We are now one of six medical call centres in the country. By handling this in house, our member's best interests are our responsibility." Helivac membership specifications:

- Transportation by a complete network of ambulances, paramedics as well as the medical helicopter service (HEMS). These are resources closest to the scene of your emergency
- Nationwide pre-hospital emergency medical care
- 24-hour medical call centre
- Trauma counselling
- A panic button with location based software
- Includes roadside assistance
- A flight assistance relief
- Helivac Assist

Roadside assistance

The Helivac Roadside Assistance program provides assistance to members who are involved in a roadside emergency.

"We arrange and coordinate the programme and have constant communication with our members," says Lockyer.

By calling the Helivac call centre in Johannesburg, members have access to a team of dedicated case management agents that assist with a range of roadside emergency assistance including accident towing, mechanical or breakdown towing, fuel and locksmith assist as well as courtesy transportation and accommodation assistance.

Roadside assist benefits:

- Accident towing
- Mechanical or electrical breakdown towing
- A flat tyre assist
- Flat battery assist
- Safe storage
- Locksmith assist
- Fuel assist
- Courtesy transportation and car rental
- Hotel accommodation
- Transmission of urgent messages

Lockyer says that Helivac does training inhouse with its medical call centre staff on a weekly basis. There are 10 medical call centre personnel based at the organisation's call centre in Meyersdal, which also has a group of administration and sales centre personnel.

Events

EMS event management forms part of Helivac's operations, providing both medical support to competitive and recreational events, as well as corporate events.

These events include road, track cycling, and mountain bike events; marathons; motorsports medical coverage; as well as school and community events. A large part of Helivac Events, on a weekly basis, are business events from large conferences being held to small meeting sessions. ►



FPA adapted its fire management to comply with new legislation

he Umvoti Fire Protection Associations (FPA) is one of 23 registered and functional FPAs in KwaZulu-Natal (KZN) that fall under the umbrella FPA (UFPA) in the province.

The area of the Umvoti FPA, based in the KZN Midlands amounts to 2 515,5 square kilometres of which eight square kilometres is urban and 2 507 kilometres is rural.

Umvoti FPA fire protection officer (FPO), Charles Haden, says that the Umvoti landowners have taken a fresh look at the overall management of the area, since the passing of the National Veld and Forest Fire Act in 1998.

"The area has important environmental assets that are affected by wildfires, but which also require the judicious use of managed fire," says Haden.

"It was felt that a combination of the four local fire control committees namely Greytown, Ahrens, Seven Oaks and Kranskop into a statutory body in conjunction with the local stakeholders would be beneficial to all parties involved. This resulted in the formation of the Umvoti FPA," he explains.

The Umvoti FPA has a membership that amounts to 62 percent of the area, excluding that of the rural and urban areas.

The FPA employs a full time FPO and there is a committee that comprises of members from the various fire control committees, as well as representatives from the corporate companies that reside in the area.



Charles Haden



Lockyer says that Helivac has two permanent paramedics, as well as a large group of paramedics that work for emergency services within the country. They are used for the organisation's EMS event management.

She says, however, that 'every event is different'. "Helivac looks at all the risks involved to establish how many paramedics are needed at each event, as well as the qualifications necessary" she says.

Training

Lockyer says that Helivac does training inhouse with its medical call centre staff on a weekly basis. There are 10 medical call centre personnel based at the organisation's call centre in Meyersdal, which also has a group of administration and sales centre personnel. "Sales training is also done weekly with the sales call centre staff and sales staff," says Lockyer.

While all the staff are trained personnel when they are employed by Helivac, the organisation will look at programmes to benefit individuals who are not fully qualified in the future.

Growth

Helivac has embarked on a direct marketing campaign to expand its membership base nationwide. "Part of this plan is the set up and management of our own sales call centre in KwaZulu-Natal," says Van Tonder.

He adds, "The Helivac membership is a great product that people do realise they need, we are confident that a large percentage of growth this year will come through this."

In 2014, Helivac seeks to expand all its individual divisions. Von Tonder says that the focus will be on expanding Helivac memberships, its events division, as well as its medical call centre on the national front in 2014.

- <image>
 - The Umvoti FPA receives a twice daily fire danger index (FDI) from the UFPA, together with the weekly predicted weather forecasts during the fire season.

Haden says that the Umvoti FPA also works very closely with a local operational centre; Golf 911. "This centre deals with all forms of emergencies and notifies the relevant response team to attend to a call.

Golf 911 also assists the FPA in communicating the twice daily fire danger index (FDI), as well as any firerelated matters to our members over the very effective radio network."

Fire behaviour

The Umvoti region areas most prone to fires are those that border onto traditional homelands or communities. Haden says that Umvoti farmers must be commended for their cooperation and response to all fires that occur during the fire season.

The region had 127 call outs in the 2013 fire season, reports Haden.

"It must be noted that on 2 June 2013, Umvoti experienced a 'black Sunday'. The FDI was 91 and we had 22 wildfires burning on that day amounting to 500 hectares of timber being affected," says Haden.

The Umvoti FPA has an annual average area burn of around 1 400 to 1 600 hectares. A large proportion of the area burnt is veld, which has very little economic value to the farmers.

Haden says, "The balance comprises of timber amounting to 300 to 400 hectares and the remainder are crops, basically sugar cane. We have been very fortunate in that we have not suffered from any major fatalities since we have been in operation."

Causal factors

The wildfires in the region occur mainly in the autumn and early spring seasons, with lightning being the only natural cause of wildfires in Umvoti.

The cause of wildfires in the region is often attributed to escaped management burns, when owners lose control of firebreaks and other prescribed burns. Haden says that other causes include ignitions from negligent treatment of picnics, cooking or warming fires or the disposal of ash from coal fires at homesteads.

"In plantations forest fires are often caused by various human activities within the forest, such as honey, hunting and various tools and appliances used by forest workers and human induced fires are equally part of this regime and amounts to the major cause of wildfires."

Haden says that human induced fires impact on the environment by increasing the spread of alien and invasive plants. "Soil erosion is also a problem as a result of the untimely removal of vegetation by fire," he adds.

Education and awareness

"We believe that prevention is better than cure and the FPA has given attention to education and awareness," notes Haden. ►

Fire protection association

► The FPA has erected warning signs on the outskirts of the Umvoti area to warn the public about wildfires.

Haden says that this education programme is conducted via articles that are published in the local media and through the local radio station lkhwezi FM, as well as presentations at schools.

"The FPA will continue to work with the authorities to promote compliance with the requirements of the National Veld and Forest Fire Act amongst non-members," he says.

The Umvoti FPA makes use of Working on Fire (WoF) to promote fire awareness programmes among the local community and at schools.

Resources

The Umvoti FPA is a new association and therefore has limited equipment; all fire fighting equipment is owned and managed by the landowners.

The FPA saw a need to provide its members with the most recent and local weather data, owing to the variance in weather conditions that is experienced.

To this end, the regional FPA committee decided to invest in and install an online weather station that is located at an airstrip on the outskirts of the town.

"This, together with the existing weather stations, has assisted our members in making those all important decisions," says Haden.

He adds, "Following on from successes achieved in the reduction of fires experienced in Northern KZN, the Umvoti FPA has introduced a sniffer hound into our area. This hound is under contract to the FPA and is managed by a local security company."

The animal was brought in to assist landowners track those who purposely set fires to properties in the region. "We have experienced a number of successes and have witnessed a reduction in wildfires," says Haden.

A new computerised fire detection system, Fire Hawk Forest Watch, has been acquired to replace the manual lookout fire towers, which has been the FPAs initial form of fire detection.

"This is a project that has been driven by the FPA, but supported by the local corporate companies that practice in the Umvoti district. The committee is very excited about this new project as it is the only system that exists and is driven by the FPA and not the corporate companies," explains Haden.

Apart from the FPO at its disposal, the Umvoti FPA also has forestry and farming business management personnel with fire fighting skills and experiences, as well as WoF to assist with fire incidents in the region.

"We also have the services of municipality fire services at our disposal. Apart from the manual lookout towers we also have four operational air strips available for fire fighting," says Haden.

The FPA is informed of any abnormal weather conditions that may have an effect on its area via Golf 911.

The UFPA also dispatches aircraft to fires should the need arise. Haden says that the UFPA also assists with the provision of required training, technical support and assistance with any legal matters.

Challenges

Property that has been land claimed is the biggest challenge that faces the FPA, states Haden.



Umvoti FPA tracking hound and her handler, Cole Ngcongo

"It is extremely difficult to establish and make contact with the new land owners," he says. "Some of them have large properties of which most of them are located on our Northern or North West boundaries. It is from this direction that our worst fires originate."

The challenges relating to land claims is being examined at a provincial and national level and the Umvoti FPA is assisted by the KZN UFPA in addressing these concerns.▲

Umvoti Municipality – Basemap



2014

March

3 March 2014

Basic Life Support for Healthcare Providers (BLS)

Participants will be able to perform the initial steps of cardiopulmonary resuscitation in victims of all ages, basic airway manoeuvres and rescue breathing with and without adjuncts Venue: Action Training Academy,

Fourways, South Africa Contact: Gugulethu More Tel: 011 450 4981 Email: gugulethu.more@ata-international.com

3 – 7 March 2014

Fire appliance reconditioning

A course designed to provide learners with a working knowledge of the correct measures to be taken to restore an extinguisher or hose-reel to full operational readiness

Venue: FPASA College, 105 Springbok Road, Bartlett, Boksburg, South Africa Contact: Christine van der Westhuizen Tel: 011 397 1618 Email: college@fpasa.co.za For more information visit: www.fpasa.co.za

For more information visit: www.tpasa.co.zo

4 – 5 March 2014

Advanced Cardiovascular Life Support (ACLS)

Candidates will be competent to recognise and initiate the management of cardiac arrest and peri-arrest conditions

Venue: Action Training Academy, Fourways, South Africa Contact: Gugulethu More Tel: 011 450 4981 Email: gugulethu. more@ata-international.com

4 – 6 March 2014

Kiev International Protection, Security (KIPS)

KIPS brings together the leading companies in the sectors of security, fire and technological safety, individual and public security, construction and protection of public and private infrastructure

Venue: International Exhibition Centre, Kyiv, Ukraine

Contact: Agnius Kazlauskas Tel: 044 (0) 207 596 5079, Email: agnius.kazlauskas@ite-exhibitions.com For more information visit:

http://www.securityshows.com

South African Qualification and Certification Committee assessment session

Venue: FPASA College, 105 Springbok Road, Bartlett, Boksburg, South Africa Contact: Christine van der Westhuizen Tel: 011

397 1618 Email: college@fpasa.co.za For more information visit: www.fpasa.co.za

10 – 13 March 2014

CPSE 2014 Excellence Conference

A conference for public services personnel seeking excellence in professional their development. The conference will have a daily keynote speaker led on the first day by US fire administrator, Ernest Mitchell, who will provide his national vision for the fire and emergency services and update attendees on issues of national interest

Venue: Green Valley Ranch and Resort, Henderson, Nevada, USA Contact: Tel: 00 1 866 782 9487 Email: info@publicsafetyexcellence.org

12 – 14 March 2014

4th Almaty International Protection, Security, Rescue and Fire Safety Exhibition (AIPS)

AIPS is a leading security and protection event in Kazakhstan for international companies seeking to expand their business into the Kazakhstan security market. The event covers a wide range of sectors

Venue: Atakent International Exhibition Centre, Almaty, Kazakhstan Contact: Agnius Kazlauskas

Tel: 044 (0) 207 596 5079

Email: agnius.kazlauskas@ite-exhibitions.com For more information visit: www.aips.kz

13 – 14 March 2014

International Trauma Life Support (ITLS) ITLS courses are designed for providers who are first to evaluate and stabilise a trauma patient. The courses provide complete training in the skills needed for rapid assessment, resuscitation, stabilisation and transportation of

trauma patients Venue: Action Training Academy, Fourways, South Africa Contact: Gugulethu More

Tel: 011 450 4981

Email: gugulethu.more@ata-international.com

13 – 14 March 2014

FPASA Advanced fire protection Content fully revised in 2011, now

addresses fire risk management, fire safety legislation, suppression system, fire growth and development, means of escape, flammable liquids and gases, structural protection, business continuity and fire safety management

Venue: FPASA College, 105 Springbok Road, Bartlett, Boksburg, South Africa

Contact: Christine van der Westhuizen Tel: 011 397 1618 Email: college@fpasa.co.za

For more information visit: www.fpasa.co.za

14 – 17 March 2014

Wildland Urban Interface (WUI) Learn how to minimise and manage threats in the WUI. Three essential tracks ensure you and your team get everything you need. Focus on community protection, operations and suppression or restoration and risk management

Venue: Peppermill Resort, Reno Nevada, USA For more information visit: http://www.iafc.org/ Education/EventsList.cfm

17 March 2014

FFA Training Basic Air Operations Course The course is designed to cover the basic understanding of the different functions of air operations

Venue: Working on Fire Training Academy, Nelspruit, South Africa

Contact: Michelle Kleinhans Tel: 078 272 9098 Email: michelle.kleinhans@wofire.co.za

17 – 19 March 2014

FFA Training Liaison Officer Course

This course is designed to empower candidates to fill the position of liaison officer within an incident management team (IMT)

Venue: Working on Fire Training Academy, Nelspruit, South Africa

Contact: Michelle Kleinhans Tel: 078 272 9098 Email: michelle.kleinhans@wofire.co.za

17 – 19 March 2014

Fire Station Design Symposium

The Fire Industry Equipment Research Organisation (FIERO) will host a fire station design symposium for fire service personnel and fire equipment manufacturers and distributors for three days in March **Venue:** Sheraton Raleigh Hotel, Raleigh,

North Carolina, USA Contact: Email: info@fieroonline.org

For more information visit: http://fierofirestation.com/

17 – 19 March 2014

Wildland Urban Interface (WUI) Conference Held in the spring, WUI brings together leaders from the local, state and federal levels to collaborate against the fastest growing fire threat in the world, the wildland urban interface. From education and mitigation, suppression strategies, high-hazard operations to policy, WUI addresses the toughest challenges facing the wildland fire fighting community

Venue: Peppermill Resort, Reno, Nevada, USA For more information visit: www.iafc.org/wui

17 – 21 March 2014

FFA Training Safety Officer Course

The course illustrates the role and responsibility of an incident safety officer within an incident management team (IMT) during an incident. Candidates will attain competence in assessing safety in an incident and in maintaining and communicating safety during an incident

Venue: Working on Fire Training Academy, Nelspruit, South Africa

Contact: Michelle Kleinhans Tel: 078 272 9098 Email: michelle.kleinhans@wofire.co.za

18 – 21 March 2014

FFA Training Single Engine Air Tanker Manager Course

This course will present the support role functions of single engine air tanker manager functions within the aviation organisation, occasionally within an incident management team (IMT) framework at an air tanker base

Venue: Working on Fire Training Academy, Nelspruit, South Africa

Contact: Michelle Kleinhans Tel: 078 272 9098 Email: michelle.kleinhans@wofire.co.za

18 – 21 March 2014

FFA Training Helicopter Management Course

This course provides background to competently and safely manage helicopters during incidents and project operations

- Venue: Working on Fire Training Academy, Nelspruit, South Africa
- Contact: Michelle Kleinhans Tel: 078 272 9098 Email: michelle.kleinhans@wofire.co.za

19 – 21 Mar 2014

Fire and Safety 2014

Fire and Safety 2014 is the 13th International Exhibition for Fire and Disaster Prevention Applications. Fire and Safety 2014 will coordinate with Government to promote disaster prevention. It is an event which creates a platform for international and domestic manufacturers to interact with and for industry channel players to discover more business opportunities

Venue: Taipei World Trade Centre Nangang Exhibition Hall, Taipei, Taiwan

Contact: Messe Tel: 00 886 2 2659 9080 For more information visit: http://www.secutechfiresafety.com/14/en/

24 March 2014

Basic fire fighting module

The basic theory of fire, methods of extinguishment, components, operations and practical use of fire extinguishers and hose reels

FPASA College, 105 Springbok Road, Venue: Bartlett, Boksburg, South Africa Contact: Christine van der Westhuizen

Tel: 011 397 1618 Email: college@fpasa.co.za

For more information visit: www.fpasa.co.za

24 - 25 March 2014

Basic Life Support Instructor Course (BLS I) All instructors must have a valid BLS Instructor certificate and have a firm, working knowledge of the training materials, including textbooks and certificates to be issued for each specific course. All examination material must be kept under strict lock and key at all times Venue: Action Training Academy, Fourways, South Africa

Contact: Gugulethu More

Tel: 011 450 4981 Email: gugulethu.more@ata-international.com

24 - 28 March 2014

FFA Training Aerial Supervision Course

This course is designed to demonstrate the role and responsibilities of an air tactical group supervisor (ATGS), helicopter coordinator (HCLO), lead plan pilot and air tanker coordinator (ATCO)

Venue: Working on Fire Training Academy, Nelspruit, South Africa Contact: Michelle Kleinhans Tel: 078 272 9098

Email: michelle.kleinhans@wofire.co.za

24 - 28 March 2014

Intermediate and Advance ICS (All Hazard)

This course provides description and detail of the incident command system (ICS) organisation and operational supervisory roles on single or multiple agency/jurisdictional incidents

North West University, Venue: Potchefstroom, South Africa Contact: Michelle Kleinhans

Tel: 078 272 9098 Email: michelle.kleinhans@wofire.co.za

25 - 29 March 2014

Desert Southwest Fire and EMS Leadership Conference

The conference is designed for the development of fire and EMS professionals at all levels. The conference will feature workshops developed with four focus areas; company officer development, contemporary issue, leadership skills development and command and control

Venue: Renaissance Hotel and Spa, Arizona, USA

Contact: Email: padams@azfirechiefs.org For more information visit: www.azfirechiefs.org

26 March 2014

Fire fighting and evacuation model

The course covers basic theory and practical exercises for the use of portable fire extinguishers and hose-reels on incipient stage fires. It also covers duties and responsibilities of fire marshals during an emergency

- FPASA College, 105 Springbok Road, Venue: Bartlett, Boksburg, South Africa Contact: Christine van der Westhuizen
- Tel: 011 397 1618 Email: college@fpasa.co.za

For more information visit: www.fpasa.co.za

26 - 28 March 2014

Third National Model Performance in Fire **Prevention Symposium**

The symposium will showcase fire prevention programs that have documented success and that are models of best practices

Venue: Sheraton Baltimore North, Maryland, USA

Contact: Email: info@strategicfire.org For more information visit: www.strategicfire.org

April

2 April 2014

Fire Industry Manufacturers (FIM) Expo

Organised by the Fire Industry Association (FIA), FIM Expo features many of the UK's leading fire detection and alarm manufacturers and focuses on showcasing the latest products and developments in this sector of the industry Venue: Warwick Racecourse, Warwick, UK For more information visit: http://www.fia.uk.com/en/Events

4 - 5 April 2014

Company Officers Leadership Training (COLT) The New York State Association of Fire Chiefs (NYSAFC) COLT program offers leadership guidance to officers and also assists chief officers in supporting those individuals performing the day-to-day operations of the fire department, as sharpening the leadership skills of your line officers will enhance the overall strength of your team

Venue: DoubleTree Hilton, Rochester, NY, USA Contact: Tel: 001 (518) 477-2631

Email: ssyzdek@nysfirechiefs.com

7 - 12 April 2014

Fire Department Instructor Conference (FDIC) With the largest gathering of decision-makers, trainers and experts, as well as manufacturers and suppliers, FDIC serves as a spearhead for networking, relationship development and future revenue growth

Indiana Convention Centre and Venue: Lucas Oil Stadium, Indianapolis, USA

For more information visit: http://www.fdic.com

9 - 10 April 2014

International Trauma Life Support (ITLS)

ITLS courses are designed for providers who are first to evaluate and stabilise the trauma patient. The courses provide complete training in the skills needed for rapid assessment, resuscitation, stabilisation and transportation of trauma patients Venue:

Action Training Academy, Fourways, South Africa

Contact: Gugulethu More Tel: 011 450 4981

Email: gugulethu.more@ata-international.com

13 April 2014

Basic Life Support for Healthcare Providers (BLS) Participants will be able to perform the initial steps of cardiopulmonary resuscitation in victims of all ages, basic airway manoeuvres and rescue breathing with and without

adiuncts

Venue: Action Training Academy,

Fourways, South Africa Contact: Gugulethu More

Tel: 011 450 4981

Email: gugulethu.more@ata-international.com

14 - 15 April 2014

Advanced Cardiovascular Life Support (ACLS)

Candidates will be competent to recognise and initiate the management of cardiac arrest and peri-arrest conditions

Action Training Academy, Venue: Fourways, South Africa

Contact: Gugulethu More

Tel: 011 450 4981 Email: gugulethu.more@ata-international.com

14 - 17 April 2014

MIPS – 20th Moscow International Protection, Security and Fire Safety Exhibition

Over the past 19 years, MIPS have become the largest and most recognised security and protection exhibition in Eastern Europe and Central Asia. It has become the traditional meeting place for local and international sellers, solution providers, installers and buyers to converge and discuss the latest developments in security solutions VVC Exhibition Centre, Venue:

Moscow, Russia

Contact: Ilya Sobolev, Tel: 044 (0) 207 596 5170 Email: ilya.sobolev@ite-exhibitions.com

For more information visit: www.mips.ru

14-17 April 2014

Workplace Fire fighting I

A programme covering practical fire fighting for incipient stage/small fires including the use of extinguishers, foam equipment, large diameter hose and BA if required

FPASA College, 105 Springbok Road, Venue: Bartlett, Boksburg, South Africa

Contact: Christine van der Westhuizen Tel: 011 397 1618

Email: college@fpasa.co.za For more information visit: www.fpasa.co.za

23 April 2014

Fire fighting and evacuation model

The course covers basic theory and practical exercises for the use of portable fire extinguishers and hose-reels on incipient stage fires. It covers duties and responsibilities of fire marshals during an emergency

Venue: FPASA College, 105 Springbok Road, Bartlett, Boksburg, South Africa

Contact: Christine van der Westhuizen Tel: 011 397 1618

Email: college@fpasa.co.za For more information visit: www.fpasa.co.za

23 - 26 April 2014

International Fire Service Accreditation Congress (IFSAC) 2014 Annual Conference Venue: Portland, Oregon, USA For more information visit: www.ifsac.org

28 - 30 April 2014

Fire and Disaster Asia

Fire and Disaster Asia 2014 emphasises the importance of implementing disaster prevention measures and presents an extensive showcase of the most innovative range of specialised rescue and disaster management products and services designed to protect life and property Marina Bay Sands Convention Centre, Venue:

Singapore

Contact: Email: steven@cems.com.sg For More Information visit: http://www.firedisasterasia.com.sg

To include your upcoming event, contact Vicki Jacob at Tel: 011 452 3135

And yet still T volunteer

I try to save this child but he's met his fate. His innocent eyes are void of hate. He and his father weren't walking far, When they were both struck down by a drunkard's car.

This night I know I will not sleep. These terrible images my mind will keep. I know these nightmares linger near. And yet still I volunteer.

Her eyes well up - compress the chest, Say a silent prayer - then two quick breaths. She's done this many times before, This fight for life kneeling on the floor.

But this time it's her best friend's mom, Whose lifeless body she is working on. This call like others will end in tears, And yet still she volunteers.

From slumber woke by a siren's wail, He rushes out in bitter gale. While others sleep this stormy night, A raging blaze this man will fight.

He bravely puts himself in danger, To save the home of a total stranger. Body cold and tired, he feels his years, And yet still he volunteers.

We train, we test, we do our best. We give an awful lot of time. And don't get paid a single dime. Thanks is a word we seldom hear.

And yet still we volunteer.

Author: Eric Levdahl



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