

FIRE AND RESCUE INTERNATIONAL

Integrated fire, rescue, EMS and incident command technology

Volume 2 No 10



Environmental Affairs
Agriculture Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA



FFA GROUP
DIRECTORATE OF INTEGRATED FIRE MANAGEMENT



FYNBOSFIRE

Photograph by: Amida Johns



TOUGHEST FIREFIGHTER ALIVE CHALLENGE

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Integrated fire, rescue, EMS and incident command technology

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Comment



Lee Raath-Brownie

It is with delight that we present the 22nd edition of Fire and Rescue International (FRI). An intriguing selection of local and international news and hands-on technical advice leads the article roundup. Our customary fire service profile and interview with its chief fire officer is also of interest. In addition, we also feature an emergency medical service supplier and continue with our exclusive series on wildfire investigations. Fire safety is featured prominently in this issue and we preview the upcoming South African winter wildfire season. We trust you will enjoy this compilation and share it with your colleagues!

Cover profile

Eminent fire ecologist, Dr Brian van Wilgen, says that a more holistic approach to fire management that takes ecological needs into account, would help protect the extraordinary biodiversity of the fynbos biome. We feature the remarkable account of the *Mimetes stokoei*, a Protea species that was thought to be extinct and its revival through an extremely hot wildfire.

FRI Images photographic competition

A stunning photograph of a controlled burn in a Western Cape plantation won the photographic competition this month. 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

Our news section includes an unfortunate Limpopo truck accident and explosion followed high-tech fire fighting research project in the US. Ekurhuleni Emergency Services' new vehicle fleet and emergency care personnel also features in this edition alongside the recently launched Mines Rescue Services' emergency rescue equipment. Other news include the recent UK and Philippines' floods, a devastating building collapse in Argentina, three train incidents, aircraft crashes and an eight-year old hero who saved his family, but perished doing so.

Ground ladders

Our technical expert, Colin Deiner, overviews ground fire ladders, its selection at size-up and the fundamental considerations when deploying ladders. Deiner also discusses the placement of ladders in various fire ground scenarios and strategy for an aggressive attack and rescue. He highlights the importance of knowing how to use ground ladders in conjunction with the aerial apparatus.

Emergency medical services

We profile Vaal Emergency Care in this edition and feature the fleet, best practices and its challenges.

Fire Service

FRI visited uMhlathuze Fire Service and we report on its organisational structure, history, equipment, training regime, fire safety efforts and challenges. We also interviewed chief fire officer, Oscar Ramaboea and learned what has led to his career path as chief. Chief Ramaboea shares his experiences, challenges, management approach and values.

Winter fire season 2014

South Africa's winter fire season is fast approaching and FRI spoke to several of the role players in the forest and wild fire sector to gain insight on the expectations and preparations for the 2014 fire season.

Fire safety

Fire safety expert, Rodney Eksteen, discusses the promotion and implementing of community risk reduction for the next generation fire service. Eksteen looks at the issues pertaining community risk reduction, how to make a difference and the evidence-based planning processes.

Wildfire investigation

Rob Erasmus of Enviro Wildfire Services' explains how to go about arranging a wildfire investigation in the third part of our series of articles on wildfire investigation.

Heritage

Lenny Naidoo describes how the rich heritage of the fire service started and the history of its icons and practices.

HESASA

FRI profiles the Household Energy Safety Association of Southern Africa (HESASA) and shares its strategies and objectives.

Fire protection association

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

Thank you to our readers, advertisers and contributors for their valued support. We are proud to serve those who serve! 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

Barry Pfister for his "River of fire" photo taken with a Sony Ericson C702 cell phone.

Photo description:

The photograph was taken on the Cape Pine Lottering Plantation during a controlled burn of an old compartment prior to planting.

Well done!

Barry Pfister, harvesting forester at Cape Pine 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

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

>>ENTER NOW!



“Burn for fynbos, not just for people,” says eminent fire ecologist

Mimetes stokoei in the Kogelberg

Wildfire managers should consider the requirements of fynbos, not only the requirements of people, in their fire management plans.

This was the message from eminent fire ecologist, Dr Brian Van Wilgen, of the Council for Scientific and Industrial Research (CSIR) in South Africa, at a recent presentation to fire protection association (FPA) officers.

Dr Van Wilgen said that a more holistic approach to fire management, that takes ecological needs into account, would help to protect the extraordinary biodiversity of the fynbos biome.

Dr Van Wilgen and his team were commissioned by the Global Environment Facility (GEF) FynbosFire Project to investigate wildfire behaviour, the risk it poses in certain areas and the information that fire bosses require in order to manage this risk.

Their research forms part of a forward-looking, three-year project being conducted by the GEF FynbosFire Project to explore integrated fire management (IFM) in the fynbos region under conditions of climate change.

“Fire management is still largely about putting out wildfires when they start,” said Dr Van Wilgen in an interview. “The priority is still to protect people and to prevent wildfire from destroying crops and infrastructure. There is too little effort going into managing fire for ecological reasons.”

Fynbos requires fire in order to rejuvenate, therefore managing fynbos equates to managing fire. While prescribed burning has been promoted for over 40 years in the fynbos region, only about 10 percent of the area burnt has been burnt in prescribed burns. The remaining 90 per cent is burnt in wildfires.

Fire protection associations (FPAs) have been formed by landowners including state landowners, farmers, conservation agencies, parastatals, rural communities and, in some regions, forestry companies.

Members of FPAs unite to predict, prevent, manage and help fight wildfires in specific areas. They seek to protect lives, livelihoods, property and the environment; however their mandate does not always compel them to manage fire for ecological reasons.

According to Dr Van Wilgen, while wildfires sometimes ensure that burns take place often enough, these frequent wildfires also encourage the spread of invasive alien vegetation which, in some circumstances, regenerates more rapidly after fire than indigenous growth.

“We have to integrate fire management and alien plant control. If we just let the mountains burn, the problem of invasive aliens will just get worse,” says Dr Van Wilgen.

He argues that greater collaborative management between conservation and private land owners is required if the spread of alien invasive plants is to be controlled.

Another issue for fire bosses to consider, according to Dr Van Wilgen, is that various fynbos species require fire of varying intensity.

However, FPAs are not easily granted permits to burn in conditions that will allow a very hot fire, given the risk that ‘hotter’ fires pose more of a risk of burning out of control and threatening human settlements.

This dilemma is likely to intensify under conditions of climate ►

Photographer: Tony Rebelo



The spectacular poker-like *Mimetes stokoei*.

The spectacular poker-like *Mimetes stokoei* was thought to be extinct after the last known specimen died in 1967. Initial attempts to stimulate germination with relatively cool prescribed burns failed. However an extremely hot wild fire in 1999 caused seeds to germinate in the Kogelberg Nature Reserve near Betty's Bay, on the Cape Coast, to the delight of botanists.

The plant has been reclassified as critically endangered, but in all likelihood will need more high temperature fires to thrive. There are many other plants in the fynbos biome that also need hot fires to flourish. "So it doesn't help to stimulate the regeneration of indigenous vegetation if controlled burns take place only in cool, moist conditions," he added.



A fire lily (*Cyrtanthus* species) flowering 48 hours after a fire at Betty's Bay

Photographer: Dr Brian van Wilgen

Photographer: www.ralphpina.com



Fire in the Kogelberg in March 2011, the natural habitat of the *Mimetes stokoei*.



Burnt proteas killed in a fire 24 hours earlier. The seeds have been shed and can be seen on the ground.

Photographer: Dr Brian van Wilgen

Photographer: Tony Rebelo



Alien pine trees invading fynbos. It needs to be cleared before burning, otherwise the problem just gets worse.

Photographer: Dr Brian van Wilgen



Masses of *Protea* seeds released 24 hours after a fire in fynbos. These will germinate in the next winter.



The Cape Sugarbird feeds on the nectar of *Proteas* and is dependent on the successful regeneration of *Protea* seeds.

Photographer: Tony Rebelo



Photographer: Dr Brian van Wilgen

Endangered species such as the Geometric Tortoise depend on healthy Renosterveld to survive.



Photographer: Dr Brian van Wilgen

Mass flowering in Watsonias in the spring following a fire in the previous summer.

► change as temperatures rise, the landscape becomes drier and wind speeds increase.

"At the moment, wildfires (as opposed to controlled burns) provide the extremely hot fires that some plants need. But if we do many more controlled burns under the conditions currently permitted, we run the risk that more species may disappear," said Dr Van Wilgen.

The answer, he says, is a nuanced approach to fire management that will help preserve the extraordinary rich biodiversity of the fynbos region, while not posing risk to communities and local economies.

In areas where invasive aliens are a problem, controlled burns should take place in cool or mild conditions. Some plants that need very hot fires might be sacrificed in these areas, in the interests of controlling rampant invasion. In areas where invasive alien plants are not a problem and where risk to communities can be controlled, hotter controlled burns ought to be allowed.

Another piece of the fynbos-and-fire puzzle, which fire management ought to address, according to Dr Van Wilgen, is the risk that too-frequent wildfires pose for Proteas.

Proteas are rejuvenated by fire roughly every eight to 20 years.

However, an increase in the quantity of wildfires in the fynbos region, as a result of a dramatic increase in people living close to fynbos, means that reseeding Proteas do not have enough time to mature and set seed between fires. As a result, their regeneration is initially inhibited, then gradually prevented due to successive, short-interval fires.

Fynbos requires fire in order to rejuvenate, therefore managing fynbos equates to managing fire.

This is a very real threat to the survival of many fynbos plant species and fauna such as the Cape sugarbird, which feeds on Protea nectar as well as to pollinate the plants.

Yet another issue to take into account with regard to the preservation of fynbos and fire, according to Dr Van Wilgen, is that the species-rich Renosterveld – a small-leaved, evergreen shrubland found only in the south, south-west and south-east Cape – remains only in fragmented patches of terrain, as crops now take up much of this area. Endangered

species such as bontebok and the geometric tortoise depend on healthy Renosterveld to survive. The remaining habitat is largely fragmented and occurs in relatively small patches, most of which are under private ownership. These patches either burn too frequently or not at all.

Dr Van Wilgen concluded that there was "a clear need for a better understanding of how to use the limited opportunities for prescribed burning strategically", in order to maximise the conservation of fynbos. Fire managers should create a mosaic of vegetation with different post-fire ages, he advises. This would reduce the impact of large fires, and ensure sufficient habitat for endemic species.

He said his discussion with the FPAs had been 'constructive and positive' and they were enthusiastic about helping to protect the ecology of the fynbos biome.

"A more holistic approach to fire management, that takes ecological needs into account, would help to protect the extraordinary biodiversity of the fynbos region," he concluded. Said Val Charlton, spokesperson for the GEF FynbosFire Project: "Brian's presentation was very helpful, as it highlighted practical ways in which FPAs can help to preserve the complex fynbos ecology. We look forward to learning more as the research continues."▲

Five killed in Limpopo crash and explosion



Four police officers and a truck driver were killed in a crash followed by an explosion on the N1 in Limpopo Province, South Africa, on 27 February this year.

Police spokesperson and colonel, Ronel Otto, said a truck travelling on the highway between Polokwane and Mokopane in Limpopo crashed into the rear of another truck that was carrying explosives.

"While our members were attending to the scene, the truck with blasting cartridges caught fire and exploded," said Otto.

The four police officers were killed, while three others were seriously injured.

Otto said that the driver of the truck that crashed into the truck carrying the explosive was also killed in the incident. However, it was unclear whether he had died from the collision or the blast.

Three other vehicles were damaged in the explosion. "The drivers of those vehicles were taken to hospital, but they did not suffer any life threatening injuries," Otto said.

The truck explosion damaged three South African Police Services (SAPS) vehicles, one ambulance and a minibus and the windscreens of 20 vehicles were damaged as well, says Mogalakwena Municipality Fire Department station officer Tebogo Magano, who attended the incident.

The SAPS police officers were the first responders to the scene of the accident and they later informed the fire department. Magano says seven fire fighters from the Mogalakwena fire department and herself as station officer on duty, attended the incident.

Magano confirmed that two trucks, one loading explosives and the other loading groceries, were involved in the initial accident. "The truck that loaded the groceries collided with the explosives truck and caught fire. The driver was trapped inside when the fire started and by the time the fire department arrived, both trucks were well alight. The explosion happened before arrival of fire personnel at the scene," said Magano.

The mangled remains of a truck following an explosion on the N1 highway in Limpopo

The explosion caused a crater in the road and parts of the trucks were found over 300 metres away.

The Limpopo Government called for a thorough investigation into the blast.

"This is just terrible. It's very hard to accept. The MEC for transport, senior government officials and the police commissioner have visited the scene," said Kenny Mathivha, a spokesperson for the premier of Limpopo. ▲

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Groundbreaking research by Underwriter Laboratories aims to save lives and homes

High-tech fire fighting research underway in Northbrook lab

US consumer safety research group, Underwriters Laboratories (UL), has undertaken a research programme that aims to save lives and homes.

The goal of the UL research was to put fires out faster through new and innovative ideas, using a warehouse to simulate a fire and its spread in a residential home.

The company known for protecting consumers, UL, ran a study in a specially designed warehouse in Northbrook, Illinois in the US, in December last year, where scientists and fire fighters converged to offer their expertise to the research project.

UL Fire fighter Safety Research Institute reports that most house fires are so fast and powerful that you only have about three minutes after an alarm to safely escape the fire.

Researchers stated a fire in a makeshift home at a Northbrook research facility. UL reports that within 45 seconds of lighting the fire, smoke billowed through the roof, which was totally consumed after two minutes.

"What we are standing in is a home, no rooms, no pictures on the wall,"

said UL consumer safety director, John Drengenberg.

He said that the fire burned for 30 minutes, reaching temperatures of 260 degrees Celsius, with the onsite fire fighters trying to determine the quickest and most efficient way to put out a fire.

"It's not as simple as you always put water here, or you always use this type of nozzle. It's understanding how the fire spreads by combing it with multiple types of suppression," said UL Fire Fighter Safety Research Institute director, Steve Kerber.

The fire was started in the attic, as the researchers tried to figure out the best way to attack the blaze with water and where to apply it.

"We are seeing an increased number of attic fires, due to the insulation people are putting on the outside of their home. So fires that start on the outside are spreading up to the attic, as well as lightning strikes and electrical shorts," stated Kerber.

According to UL researchers, there is less time to get out of any home that has caught fire in modern buildings. You used to have 17 minutes to run

after the smoke alarm went off. That time is down to three-to-four minutes, because of more synthetic items like pillows, furniture and building materials now in most homes, noted the UL report.

Fire prevention experts say you need to properly maintain electrical, heating, ventilation and air conditioning systems and chimneys. Also, get those areas of the home inspected before moving in.

The Chicago Area Red Cross has helped many people whose homes were destroyed in fires in the communities of Roseland and Englewood, in Chicago that have been termed as 'hot zones'. In 2013, the Red Cross responded to 123 fires and helped more than 550 people in both communities.

The fire experts at UL are hoping those numbers can be reduced after their research is complete. "Just where is the heat? Where are the dangers for fire fighters and, of course, for the occupants," said Drengenberg.

The detailed results of the fire fighter study is expected to take several months and UL planned to share them with fire departments across the country.▲

Ekurhuleni emergency services acquires new resources



Ekurhuleni officially dispatched a fleet of 12 ambulances and 176 new emergency personnel in March

Responding to emergency calls of its residents is set to be more efficient as the Ekurhuleni Municipality's Emergency Services in the East Rand region in Gauteng, South Africa, has invested in a new vehicle fleet and 176 fire fighters and emergency care personnel.

Ekurhuleni reports that those in need of an ambulance in the municipality can expect a response time within 15 minutes to when the call was made.

The municipality has doubled the average number of its emergency response vehicles on call, throughout the day and seven days a week, from 30 to 65 vehicles since August last year.

Ekurhuleni media liaison officer, William Ntladi, says that an additional 12 ambulances will be added to the City of Ekurhuleni's Disaster and Emergency Management Services fleet and this includes a new disaster management bus.

To ensure that these material resources are matched by human resources, Ekurhuleni dispatched the 176 newly appointed fire fighters and

emergency care practitioners to their posts by Ekurhuleni executive mayor, Councillor Mondli Gungubele, on 5 March this year.

Gungubele also announced that Ekurhuleni will soon be opening two new fire stations, namely Zonkizizwe Fire Station and Comercia Fire Station, with 56 emergency care practitioners set to join each station.

Capacity will be boosted at the Palm Ridge, Wadeville, Tsakane, Bedfordview and Nigel Fire Station which will also be allocated some of the new emergency care recruits.

According to the Gungubele, the number of emergency calls responded to within five minutes of dispatching an ambulance increased from zero percent to 9,43 percent in the last six months. Emergency calls responded to within 15 minutes increased from 78 percent to 80 percent, while the remainder of all calls are attended to within less than an hour.

"The number of ambulances on the road 24/7 will now be increased to an average of 74, which means these

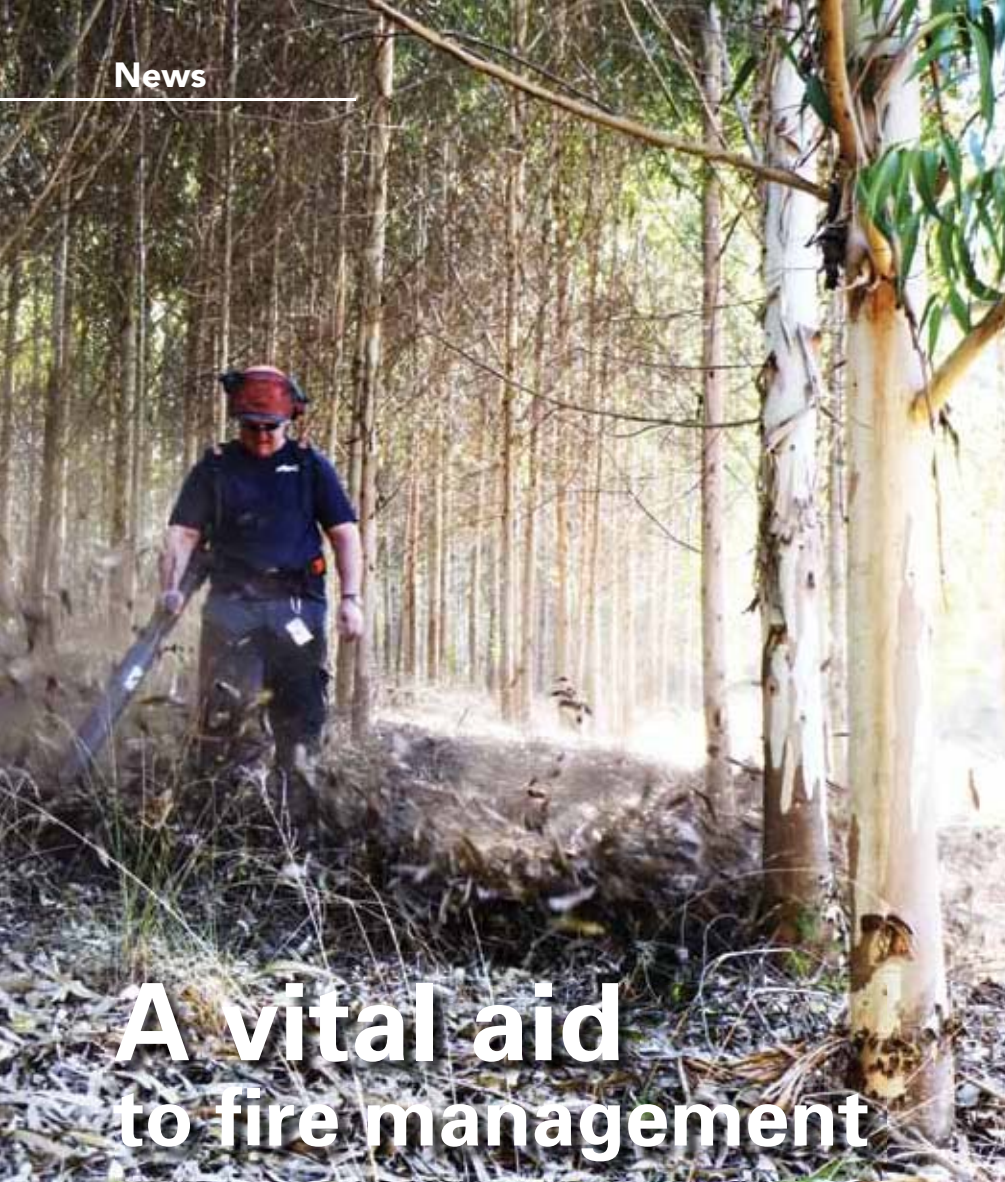


SAESI president Sam Masibi and Ekurhuleni Executive Mayor Mondli Gungubele at the vehicle handover ceremony

response times will be reduced even further," said Gungubele.

He added, "We are also closing the gap in terms of manning levels at our fire stations, and the fire and rescue crew on any shift is going to increase to four members, while the standard is five."

A total of 170 of the new permanent staff members were appointed from the Ekurhuleni's 400-strong Fire Brigade Reserve Force, providing an entry into the field of emergency care for unemployed fire fighter two or basic ambulance course graduates.▲



A vital aid to fire management

Fire management is just that – managing fire; making sure that the worst possible circumstances and situations can be managed without loss of life or property. As we approach the South African winter fire season, it's time to assess and evaluate: checking fire fighting equipment for readiness, training and refreshing fire teams, and considering if the equipment on hand is ready for action and up to any challenge.

Stihl's reputation for creating tools and equipment with standards of excellence, efficiency, comfortable handling and durability contributes when tackling basic fire management tasks such as clearing flammable debris and accumulated leaf litter from fire lines. Stihl's powerful BR 600 backpack blower, with a high air-throughput of 1 210 m³/h (maximum 1 720m³/h), is a valuable addition to any fire management arsenal.

The applications and advantages of the BR 600 add to a landowner's fire management capacity and include:

- Clearing accumulated leaf litter from previously constructed fire lines;
- It can also create a new fire line, clearing away flammable debris with a strong blast of air;
- It can quickly and cost-effectively clear dry earth mineral firebreaks;
- It can replace beaters on a fire line;
- It can be used in the management of cold fires and where control is required while clearing a line for back burning.

While the BR 600 is not an absolutely comprehensive fire fighting tool on its own, its numerous and diverse uses make it an indispensable piece of equipment for effective fire management, no matter the size of the property. Blowers are believed to have been used by the US Forest Service for fire management efforts as far back as the late 1960s. Its most useful features include the following:

- It is fast to use and can quickly clear areas that would previously have laboriously been cleared with rakes/hoes;

- It is easy to use and light to carry, weighing less than 10kg, making it undemanding to handle and carry around, even over long distances;
- It is comfortable to use for long periods, with one of the best power-to-weight ratios on offer, reduced vibration, and an ergonomic polymer frame with an adjustable, waist-height, easy-to-wear harness;
- It is more comfortable to use for extended periods than hand-held equipment and basic tools such as beaters;
- It requires little in the way of training for efficient handling by first-time-users;
- Its hardy 3kW, 4-mix engine ensures one of the lowest fuel consumptions of similar blowers in its class, making it a cost-effective piece of equipment;
- Being so light on fuel is a vital factor when working out in the field with few convenient refuelling opportunities. The 1,4-litre fuel tank offers approximately 90 minutes of running time;
- It can be used on hard-to-reach terrain and easily clears under and between rocks and roots;
- Be 'water-wise': with blowers it is possible to reduce overall water consumption when burning firebreaks in some areas – useful when working with limited water supplies.

This multi-faceted fire management tool is not only varied in its uses, it also offers environmentally-friendly features, such as being one of the cleanest-running backpack blowers in its class, with significantly reduced emission and noise levels.

Despite its pluses, the BR 600 does have its limitations. A backpack blower is not the ideal tool to use in very long grass or on very hot fires and cannot replace water out in the field. The user should also keep in mind the terrain; walking through thick bush or climbing through fences could be challenging. As with all equipment it's a case of horses for courses and the user should always properly assess the situation before choosing the appropriate tool for the job.

Quick, clean, cost-effective and user-friendly, Stihl's BR 600 blower offers an effective solution to those assessing their fire management capabilities and equipment. ▲



Photo courtesy of SA Forestry magazine www.saforestrymag.co.za

A powerful team player.

Fire management is just that: managing fire, using the best tools and equipment for a demanding and potentially life threatening task. STIHL's powerful BR 600 backpack blower, with a high air-throughput of 1210 m³/h, is a valuable addition to any fire-management arsenal. Ideal for moving accumulated leaf litter from previously constructed fire lines and clearing away flammable debris for the creation of new fire lines, the BR 600 is fast and easy to use, with low fuel consumption and reduced emissions and vibrations. The perfect addition to any fire management team.

Like any premium item, STIHL products are only available at specialised dealers nationwide, for expert advice and superior after-sales service.





Eight year old boy killed while saving six relatives from house fire

Fire fighters and family members attend Tyler Doohan's funeral in New York in January

Fire fighters from the New York village of Fairport in the US adopted an eight-year-old boy as one of their own, after he died saving six relatives from a fire that destroyed his grandfather's upstate New York home.

New York fire officials say Tyler Doohan awoke six of his relatives, four adults and children ages 4 and 6, who were sleeping in the trailer, but was killed when he tried to help his disabled grandfather.



Tyler Doohan

Reports indicate that Doohan ushered most of his family out of the trailer, but he turned around and ran back in when he realised two were missing.

The local community in the western New York village of Fairport took to mourning following the death of the heroic eight-year-old boy.

Corporal John Helfer of the Monroe County Sheriff's Office said nine people were in the single-wide mobile home in the town of Penfield when the fire started around 04h45 on 20 January 2014.

Sheriff's deputies say Doohan, who was staying in his 57-year old grandfather, Louis Beach's trailer overnight, apparently discovered the fire and roused six people who got out safely.

A local sheriff's deputy and a fire fighter arrived at the scene within a minute of the dispatch call, but the trailer was already engulfed in flames and smoke, said Penfield fire chief, Chris Ebmeyer.

The first fire crew to arrive tried to enter the trailer but was driven back, he said. The inferno ultimately claimed

the life of Doohan, his grandfather and his amputee uncle, 54-year-old, Steven Smith.

Another of Doohan's uncles, Joseph Breyette, said his young nephew heard his uncle calling for help inside the house and rushed in to get him.

'The kid has got more guts than I know of,' Breyette said. 'I mean, to run back in there and go through what he went through to try to save his uncle, what can you say for the kid? He was a great kid.'

The child's body was discovered by fire fighters in the rear bedroom just a few feet away from the bed of his disabled uncle, who also perished in the fire along with the homeowner.

Doohan's mother, Crystal Vrooman, said her son was a 'sweet boy' whose sense of humour made everyone smile.

For the funeral service, a stream of cars and fire vehicles made its way to St. John of Rochester Catholic Church in New York in honour of Doohan and the fire's two other victims, his grandfather and uncle.▶

Newly qualified female pilot recognised by Transport Minister



Khosini Ngobese with the Minister of Transport, Dipuo Peters



The AMS provides emergency rescue and air ambulance services in remote rural communities

Helicopter pilot with nonprofit air ambulance network and emergency rescue service, Air Mercy Service (AMS), Khosini Ngobese, was honoured by the Minister of Transport, Dipuo Peters, at the launch of the South African Civil Aviation Authority (SACAA) bursary scheme programme.

Minister Peters was the guest of honour at the launch of the programme, which took place on 5 March 2014. The aim of the bursary scheme programme is to address skills shortages and transformation challenges in the aviation industry.

Khosini, a former beneficiary of this programme, successfully completed

her training and was recognised for her outstanding achievements. She now counts among the first black female helicopter pilots in South Africa.

"AMS has been instrumental in helping me acquire the necessary flight hours and experience," says Khosini. "Having the license is one thing, flying as a pilot and executing your job is another. Over and above your license, one needs flight hours and experience and I couldn't thank the AMS more for this great opportunity and exposure."

The AMS was established in 1966 by the South African Red Cross Society and currently has bases in the Western

Cape, Northern Cape, KwaZulu-Natal, Mpumalanga and the Free State. AMS provides rural health outreach and emergency rescue service as part of an air ambulance network to metropolitan area and remote rural communities.

The organisation works closely with the provincial departments of health and community health workers to assess needs, identify backlogs and implement appropriate healthcare programmes.

The AMS congratulated Khosini on her achievement, stating that she is an inspiration to other young cadets who wishes to embark on a journey into the aviation industry. ▲

► An online fundraising campaign set up on YouCaring.com raised more than \$30 000 for Doohan's funeral.

Outside the church, fire engines lined the streets and fire fighters directed traffic.

Fire fighters clad in dress blues and white gloves from departments around the Rochester area attended and they lined the church lobby.

At the church entrance, chief, Chris Ebmeyer, held a red-and-white helmet with a shield bearing Doohan's name, which he gave to the boy's mother. "We consider him an honorary fire fighter," he said.

"He saved six people. They all would have died if he hadn't woken up," noted Ebmeyer, who is chief of the volunteer fire company

in Penfield, a suburban town of 36 000 residents.

Fire officials had said more than 100 fire fighters attended the service as a tribute to Doohan's heroics.

The cause of the blaze appeared to be electrical in origin, but the inquiry was continuing as investigators interviewed the injured relatives, Ebmeyer told media. ▲

A blow for forest fires from Husqvarna

The forestry industry, in particular, is extremely vulnerable to wildfires and in the past 25 years, South Africa has lost an average of 14 000 hectares each year of forested areas to runaway fires, reports outdoor power products company, Husqvarna South Africa.

Most regions in South Africa are situated in naturally fire prone ecosystems. Inland, during winter, landowners prepare for devastating blazes that are fuelled by dry vegetation and strong winds.

According to Husqvarna South Africa general manager of product support, Bronson Gunter, in recent years increased frequency and devastation of forest fires has become a worldwide trend.

“Clearly, this means we need increasingly innovative ways to prevent and control fires. However, we also need to be aware of the basics and it has been proven that the use of firebreaks are by far the most effective means of dealing with fires and preventing disasters,” states Gunter.

By law in South Africa, every landowner must prepare and maintain firebreaks. Gunter says that in keeping with its reputation as an industry leader in the area of product research and development and as an innovator when it comes to providing effective solutions for the forestry sector, Husqvarna was aware that creating firebreaks was not only an extremely difficult, high risk exercise but also costly and labour intensive.

“We set out to find a less labour-intensive answer to controlling the burning of firebreaks than the traditional method of using rakes and fire beaters. The answer clearly lay in the speed and efficiency of mechanised equipment. That is why Husqvarna’s introduction of the 580BTS blower into the South African market has elevated fire control to the next level and it undoubtedly makes a difference,” he says.

The 580BTS Blower elevates fire control in forests and wildfires



580BTS blower

Husqvarna’s 580BTS is a powerful commercial backpack blower, with a tube mounted throttle control making it easy for the operator to regulate air flow. Innovative fan design and a powerful X-Torq engine result in impressive air flow and high air speed.

The X-Torq engine design reduces harmful exhaust emissions by up to 75 percent and increases fuel efficiency by up to 20 percent. The Husqvarna 580BTS’s fuel pump is specially designed for easy starting while the commercial grade air filter ensures longer operating times and trouble free use.

In addition, it is ergonomically designed with the operator’s comfort in mind, with an adjustable soft-grip handle, a load reducing harness with wide shoulder straps and a hip belt to ensure that it is easier to carry and operate for long periods.

Versatile solution

Husqvarna put the 580BTS blower through its paces in a variety of different fire control and fire break preparation applications.

“After extensive product trials, the 580BTS blower surpassed expectations. With an air-flow speed of 329 kilometres per hour combined with a volume capacity of more than 25,7 cubic metres per second, it was effective in preventative fire control as well as in the extinguishing of small or short grass fires, either directly or from the rear,” explains Gunter.

Husqvarna recommends that fire control teams comprise at least two operators so that the fire can be controlled from different directions. Once the operator is ready to clear or control the burn, the blower’s nozzle is directed at the base of the fire, starving it of oxygen and fuel.

By standing a few meters behind the fire and blowing half-throttle in the direction the operator wishes the fire to move, the 580BTS can fuel a wet or slow burning fire and successfully control a burn in the desired direction, an especially useful application for creating trace line firebreaks. It is in the removal of the fuel component prior to burning where the 580BTS comes into its own.

“With the blower at full throttle and the nozzle close to the ground, the operator can navigate through the trees, clearing loose debris and channeling this away from the fire break. This opens a clean round break at the base of tree, protecting the bark from the fire. Cleaning debris from around trees would ordinarily be a more time consuming task without the use of a blower,” he says.

The bigger picture

According to Gunter, the use of the Husqvarna 580BTS is not only an effective means of creating firebreaks, but is also environmentally friendly. “This is the best of both worlds. Not only is the 580BTS a more commercially viable solution, but it is one that allows all stakeholders in the forestry sector to contribute towards making this sector more ecofriendly.▲



Unbeatable power, right when you need it.

Don't be fooled by the compact design. Under the shell of our new series of blower, there is an impressive blowing capacity. Thanks mainly to a unique, efficient fan design and especially if you choose the Husqvarna 580BTS, which is in a class of its own when it comes to air speeds and air flows. The new machines have the latest in engine technology, giving you more power and better fuel economy. They're solidly built and have air filters enabling them to withstand even the most dust-filled environments.



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75.6 cc - 3.1 kW - air speed 92.2 m/s - 11.8 kg



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Multimillion Rand emergency rescue equipment launch

The Schramm T130XD rescue hole drill



Mines Rescue Services personnel ready the Rescue drill unit capsule

The Chamber of Mines unveiled its new rescue hole drill, part of a R60 million project, at a media launch at Anglo American's Goedehoop Colliery in Middelburg, South Africa, on 18 February this year.

The purchase of the new rescue drill unit is a joint initiative between the Collieries Committee and its members, as well as the Collieries Training College and the Mines Rescue Services and signals the commitment to the safety of miners.

A simulated rescue was conducted to demonstrate the capacity of the potentially life-saving rescue drill that was acquired earlier this year.

Chamber of Mines chief inspectorate, David Msiza, presented an official address on behalf of the Minister of Mineral Resources, Susan Shibangu, at the launch of the rescue hole drill and Chamber of Mines collieries committee chairperson, Wilco Uys, delivered the keynote address at the launch.

Worst mining incident

Uys noted that South Africa's worst mining incident occurred in 1960 at

the Coalbrook Colliery in the Free State when 435 coal mine workers lost their lives as a result of a widespread collapse of the mine's workings.

"Subsequent to this tragedy the South African Chamber of Mines commissioned the purchase of a rescue drill to rescue miners in the event that they get trapped. The first drill was replaced in 1974 and was in service until today," said Uys.

The current old drill was used in two incidents; the first incident was to extract and save the lives of 26 trapped miners in 1991 at the Emaswati Colliery in Swaziland and it then played a pivotal part in the rescue of 14 coal mineworkers trapped in a fire at the Gloria Colliery in Mpumalanga Province in 1994.

Uys said that the rescue drill was used to construct a borehole through which rescue teams could safely access the underground workings and lead the trapped mineworkers to safety.

Chamber of Mines commissioned a task team to identify and purchase a new generation rescue drill to replace

the rescue drill that was purchased in 1980.

"We are here today to present our replacement rescue drill. The commissioning of the rescue drill replacement followed an investment of R22 million by the South African Coal Mining industry to acquire a mobile fire inertisation system to put out underground fires in coal mines," explained Uys.

He said the idea was to have available a comprehensive emergency equipment pack that could not only extract trapped mineworkers, but also extinguish underground coal mine fires.

The rescue drill unit and other emergency rescue equipment would act as the last safety net of the mining industry. "Our focus as South Africa's coal mining industry is to ensure that we operate our mines safely, with the prevention of emergency situations being the main aim," stated Uys.

Mines emergency preparedness

Chamber of Mines chief inspectorate, David Msiza, said that mine health and safety performance remains ▶



Wilco Uys



David Msiza



Christo de Klerk



Johan Venter



Henry Jonker, Christo de Klerk, Adriaan van der Westhuizen and Gary Bullen



Members of the Mines Rescue Services operational crew



Hazmat personnel, Marthinus Oosthuizen, Johannes Stephanus Prinsloo, Julius Clerence Maloney, Schalk Willem Viljoen



Operators of the mining colliery inertisation system, Jan van Staden, Peet Myburg and Kobus Pienaar



Mines Rescue Services team member, Jaco Joubert

► of great concern and needs to continuously improve.

He said the launch was an opportunity to share some ideas pertinent to matters of emergency preparedness and response on mine rescue, adding that the mining industry remains a key player in the economy of South Africa. "Since 1994, we have consistently worked at strengthening mine health and safety compliance and to this day we continue to pursue the ideal of 'zero harm' relentlessly. We do this because we are mindful that without the workers, the industry cannot thrive," said Msiza.

Msiza recalled the 18 fatalities suffered in the mining industry this year, owing to underground mine fires, rockfalls and trackless mobile machinery. "This alarming trend of fatalities at our mines is a major setback for the mining industry, given that 2013 is the reporting year on the achievement of the 2003 milestones that we all agreed upon. We believe that a state of zero harm can be achieved through the continued collaboration with all our stakeholders including organized labour and employers."

Msiza said that it was important to indicate that our Mine Rescue Services and equipment used in rescue operations are rated amongst the best in the world. "In this regard, the Department commends the coal industry and the Chamber of Mines for investing in the new technologically advanced rescue drill unit," he said.

Rescue drill background

Following the Coal Brook disaster in 1960, the Chamber of Mines agreed to the acquisition of a rescue drill unit in 1962, which was capable of extricating trapped persons from underground during emergencies.

In 1977, Ingersoll Rand built the world's fastest rescue drill for South Africa and the T5 unit became operational. Since then the rescue drill unit, situated at the Colliery Training College in Emalahleni, has been available for emergency rescue response in South Africa's coal mining industry.

During 2010, a task team was established to investigate and recommend suitable equipment to replace the ageing current equipment.

The Collieries Committee, in the following year, agreed to the task team's recommendations and approved the funding for the new equipment and on 29 November 2011, the first order of R45 million for the large drill was placed.

Colliery steering committee

Mines Rescue Services general manager, Christo de Klerk, in his presentation at the launch, explained that a colliery steering committee recommended the purchase of the rescue drill, including a 165-millimetre probe hole drill.

De Klerk discussed the procedure of utilising the drill unit in an emergency saying that the first step requires locating the trapped persons. This is followed by a sample tube for gas detection. The 165 millimetre probe hole is then constructed to provide trapped persons with life sustaining items, including food and water. A camera is deployed underground to assess the site and conditions and thereafter a 660-millimetre rescue hole is created for the deployment of a rescue capsule.

Technical specifications

The components of the rescue drill unit is made up of a range of special equipment including the floxal nitrogen plant, compressor plant, generator,

gas chromatograph and bore hole camera and a mobile rescue winder.

This includes the Schramm T130XD rescue hole drill that replaces the Schramm T5 rescue drill and the Schramm T685WS probe hole drill that replaces the Schramm T4 probe drill.

The rescue hole drill uses a 660 millimetre standard hole diameter hammer bit with a pullback capacity of 59 000 kilograms, while the probe hole drill has a pullback force of 42 500 kilograms with a 165-millimetre standard hole diameter, using reverse circulation technology.

De Klerk said that the full rescue unit is a mobile unit that is designed to be operated at any mine in South Africa. He explained that a triage system is utilised in a mine rescue operation, which places trapped miners into categories of priority for trapped miners in order to determine the first person to be rescued.

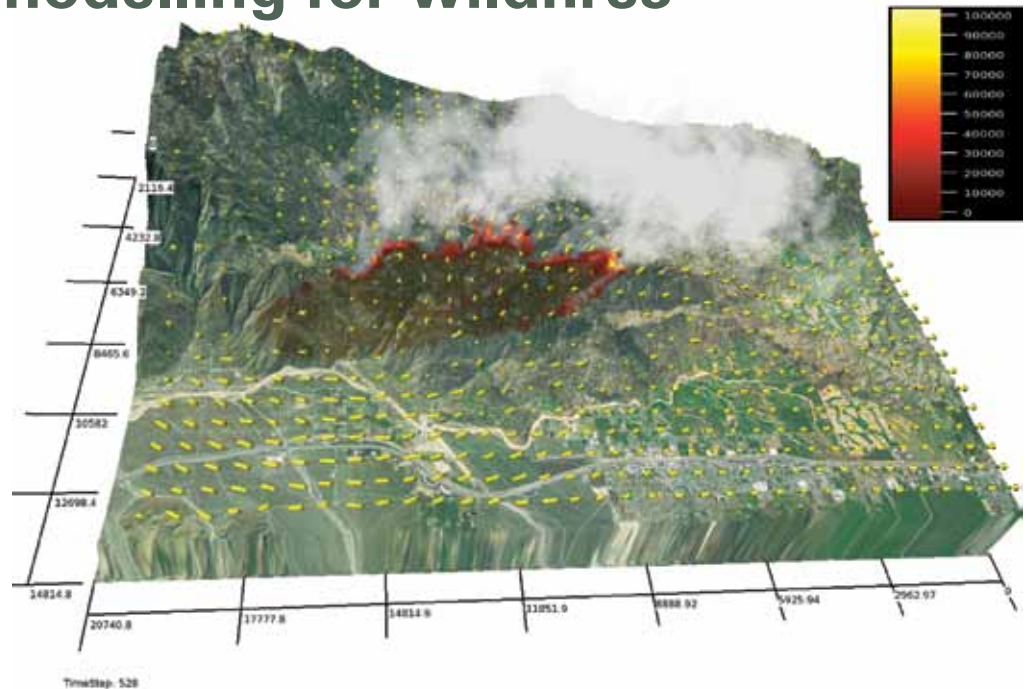
De Klerk mentioned that the mobile winder is able to drill 0,5 metres per second and it uses a 13 millimetre non-spin rope of 300 metres in length. The borehole camera is a 500-metre umbilical cord with 360 degree pan capabilities and is waterproof up to 60 bar pressure.

The floxal nitrogen plant forms part of the colliery inertisation system and has a flow rate of 1 800 newton metres cubed per hour, with a nine-bar pressure and the nitrogen extraction through permutation produces 97 percent purity.

"When people are trapped underground, we have to utilise all the equipment. Only the mobile rescue winder is kept at the station but mobilisation of all equipment happens very quickly," stated De Klerk. ▲

Scientists develop computer modelling for wildfires

Animations showing weather-fire behaviour of the growth of wildfires



Accurate predictions of the growth and behaviour of long-lived wildfires can be achieved using new computer modelling techniques developed by scientists at the Boulder National Centre for Atmospheric Research (NCAR) in 2013.

Scientists are now touting the new technology, saying that it takes a new approach to wildfire mapping enabling the prediction of fire growth and behaviour.

The new modelling technique is the result of a partnership between NCAR and scientists at the University of Maryland. The technique uses newly available, fine-scale satellite data collected on active wildfires, combined with advanced simulations of the interactions of fire and weather, to offer its forecasts.

NCAR scientist, Janice Coen, says, "Mostly wildfires have been dealt with by foresters, but when we looked at them with our atmospheric scientist eyes, we saw a lot of things we understood from studies of thunderstorms and other meteorological phenomena."

Coen has been with NCAR for 21 years and has a background in atmospheric modelling of air over

complex terrain. She says the model takes into account not only the effects of winds on fire, but also fire's effects on weather.

"As the fire consumes fuel, it produces heat and water vapour," she says. "This makes the air warmer than the air around it, so it wants to rise, and more air has to move in to the base of the column to replace it, so that affects the winds near the fire."

Coen, who worked with University of Maryland professor, Wilfrid Schroeder, on the model and was lead author of the study, says that by 'cycling', or updating the fire behaviour model with fresh satellite data every 12 to 24 hours, the scientists showed they could forecast fire growth and behaviour.

Using data collected during New Mexico's devastating Little Bear Fire in 2012, scientists were retrospectively able to show the modelling technique could accurately forecast fire growth, even without being able to directly account for variables, such as fire fighter activity and spotting.

"We know every 12 hours we're going to have a fresh satellite map," Coen said. "By repeating this for 12 to 24 hours, we learned we could simulate

the whole life cycle of a fire from ignition to extinction and we can do it well, which is important."

Coen developed the computer model, known as the Coupled Atmosphere-Wildland Fire Environment and Schroeder produced a higher-resolution satellite instrument, known as the Visible Infrared Imaging Radiometer Suite, according to the NCAR.

The instrument, operated by the National Aeronautical Space Administration (NASA) and the National Oceanic and Atmospheric Administration, covers the entire globe in 12 hours or less and provides infrared images with pixels that represent spaces roughly 365 metres across, according to NCAR.

In the past, similar instruments provided less detailed images where each pixel was about one kilometre, making it impossible to distinguish between burning and already burnt areas around an active fire.

"The transformative event has been the arrival of this new satellite data," Schroeder said in a news release. "The satellite data has tremendous potential to supplement fire management and decision support systems, sharpening the local, ▶



Fire fighters using iPads to save lives

Fire fighters in Batavia, New York, are adopting some familiar technology to help them save lives.

Police have been using computers in their cars for years and now Batavia fire fighters will be using Apple mini tablets in their fire trucks.

The iPads will display 911 call information, hydrant locations and directions, along with other crucial information that will allow fire crews to be quicker and more effective in responding to calls.

Batavia Fire Department Lieutenant, Robert Fix, said, "It's going to allow

them less time with their head in a book and more time looking down the road seeing what's coming up and accessing the situation. Before they are down to the next intersection, they can be looking at the scene with an overhead view with pictometry and know where the hydrant is. That allows them more time on the way to see 'do I have smoke showing in the sky'? Do I have people running around the scene?"

Fire fighters can also identify hazardous materials through an app that will give fire officials evacuation procedures for affected areas. There's even an app that shows fire fighters where they should cut

through a car when extricating a passenger.

Fire Chief, Jim Maxwell, said it will also come in handy for everyday tasks like building inspections. The fire department also said its building records will be compiled into computer files on the iPad. "Once they get used to it and acclimated to it, I think it'll be a benefit for the fire department as well as the city as a whole," said Maxwell.

Lieutenant Fix says he's proud to be on the forefront of getting technology like this into their vehicles and the hope is that other departments will adopt similar technology in the near future.▲

► regional and continental monitoring of wildfires."

Coen pointed to numerous potential realworld applications for the modelling, with the most obvious being that it could provide information for fire fighters and fire managers that may prevent dangerous or even deadly situations, like the one that claimed the lives of 19 fire fighters in Arizona this summer.

She said it may also be able to identify fires in their formative stages to allow for better resource allocation and prioritisation if multiple fires are burning in the same region.

"There are so many factors that come together to make a fire suddenly intensify that even highly trained people cannot anticipate when this is going to happen," says Coen. "This is another tool in people's tool box for making decisions."

Boulder County wildfire management officer, Jay Stalnacker, says he had heard about the new modelling technique and thinks it is a great idea. Its usefulness during an active fire has not yet been determined, according to Stalnacker.

"I think the practicality of it is going to be all up to the guys and gals on

the ground and how the interface takes place between the tools and the fire manager," says Stalnacker. "A wildfire is a natural disaster. It's Mother Nature and her fury. No matter what tools you give us, heavy air tankers, unlimited water, satellite imaging, Mother Nature is going to do what she needs to do."

Coen said the next step is to secure additional funding of between \$1 million and \$2 million to continue developing the modelling technique. She expects it to be ready for a limited test on a live fire in the next one to two years.▲

SafeQuip continues to revolutionise the fire fighting industry

Local manufacturer and wholesale distributor of fire fighting and water-related equipment, SafeQuip, reports that it has introduced a new refillable, fine-spraying, backpack style extinguisher to its product range. The new Embersafe product is especially useful in prescribed burning and the establishment of firebreaks or any fire situation, where embers need to be extinguished effectively.

The refillable tank uses an innovative air pouch system to regulate pressure inside the tank ensuring a continuous stable high pressure flow at all times.

SafeQuip product manager for Davey Water Products, Malcolm Corns, says the fine spray allows the operator to cover more ground, while completely subduing embers in its path.

"The product is ideal for use in harsh South African conditions as it is simple, easy to use and rugged. The 25-litre tank can easily be refilled from any tap or other water source through a standard coupling. The new extinguisher is imported from the US and complements our existing product range," notes Corns.

In addition, Corns says that the company's signature range of skid units with Australian Davey pumps are still very well received in South Africa. He also said that the units are specifically designed for fire fighting and are typically fitted on the back of a bakkie for use in wildfire and forest fire fighting. These skid units



SafeQuip offers a wide range of fire fighting products such as extinguishing agents or fire retardants

range from 300 to 700 litres and are manufactured in Cape Town.

"Accessibility is key in preventing fires from spreading in plantations and having these mobile units available enables the fire fighter to reach the fire quicker. The units are especially useful in compartments that are inaccessible to large fire tenders."

Furthermore, the Davey water pumps differentiate SafeQuip's skid units as the pumps not only supply a steady high pressured water flow, but can also draw water from almost any available source. This feature ensures a continued water supply and reduces refilling rates, reports SafeQuip.

The Davey pumps are engine-driven and are available in single and twin conversions, which offer either high flow or high pressure. Engine types include Honda engines for petrol and Yanmar engines for diesel.

Features of single-impeller skid unit:

- Pump: Honda GX160
- Tank capacity: 500, 600 and 700 litres
- Engine capacity: 5,5 horsepower
- Suction diameter: 40 millimetres
- Pump flow rate: 500 litres per minute or 7 bar
- Hose length: 30 metres
- Hose type: dragline South African Bureau of Standards (SABS)
- Weight: about 115 kilograms
- Spray reach: 20 metres

The skid unit has a twin-impeller variant with a few differentiating

features to the single impeller and this includes the hose length, which is 60 metres and its weight of 125 kilograms.

SafeQuip also offers an economy FireKing skid unit with a 500-litre capacity, a 10-metre hose, a three-way valve on suction and a five metre external suction hose assembly for a low volume application.

Features of low pressure

FireKing skid unit:

- Pump: H 50 WP
- Tank capacity: 500 litre
- Engine capacity: 7 horsepower
- Suction diameter: 40 millimetres
- Pump flow rate: 466 litres per minute
- Hose length: 10 metres
- Hose type: SABS 18 bar
- Weight: 82 kilograms
- Spray reach: 18 metres
- Suction hose and trainer: 5 metres
- Branch pipe (inclusive)

A high pressure FireKing skid unit is also available and this features a piston pump with a flow rate of 25 to 52 litres per minute and a 180-bar hydraulic hose. A high-pressure trigger gun is included in the unit.

A distribution agreement with Davey Water Products, an Australian manufacturer of pumps and booster sets, has enhanced the products on offer from SafeQuip, which is an all-round fire fighting equipment supplier and considered the leading local manufacturer of fire fighting equipment in South Africa.▲



SafeQuip's new Embersafe extinguisher is especially useful during prescribed burning and the establishment of firebreaks

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UK flooding at Christmas persists into New Year



Wales's emergency services rescued people from their own homes in December 2013

Southern England was hit by heavy flooding as storms lashed across the UK in December last year, with many people rescued from homes overnight in the regions of Surrey and Dorset in the south east of England.

Some 50 000 homes across the UK were without electricity, following the stormy weather on Christmas day, reported the UK's Energy Networks Association.

In December, forecasters warned of strong winds and blustery showers that would cause further significant flooding as thousands of families struggled to recover from the storms at Christmas. About 1 000 homes in

south-east and south-west England were flooded and at one stage, more than 300 000 properties had no electricity during this period.

The UK Coastguard rescued 76 people from a flooded caravan park in Yalding on Christmas Eve, moving residents by boat and in four-by-four vehicles to a leisure centre.

The Environment Agency (EA) said the River Medway in Kent, also in southern England, had continued to rise in late December and flood risks would continue.

The EA had issued 100 flood warnings for England and Wales in the UK, signifying that flooding was

expected, with more than 200 flood alerts, where flooding was possible. The flood warnings would prove accurate as high tides and strong winds brought flooding to Wales, Scotland and western England in January this year.

Coastal regions were battered by vast waves and strong winds, with renewed rain bringing over 100 flood warnings and power cuts across the UK.

A tidal surge caused flooding in western and southern Scotland as about 100 people took shelter for high tide at a school and a community centre in regions in Scotland where waves peaked at 1,8 metres. ▶



Severe flood warnings were issued at England's North Sea coast following strong tidal waves



Severe storms flooded large parts of southern England during the past Christmas period

Massive fire at construction site in Salt Lake City, US



A fire destroyed a multiresidential building development in Salt Lake City, US

A building project under construction in Salt Lake City, US, was engulfed in flames on 9 February releasing towering smoke and spiralling embers into the night sky.

It took at least 60 fire fighters a little more than an hour to douse a four-alarm fire at the construction site in downtown Salt Lake City. There were no people injured in the inferno and the cause of the fire was still under investigation.

The building was a multiresidential development that went up in flames despite two days of intermittent rain in the city.

When fire fighters arrived at the site, they rushed into the building to

extinguish the blaze, but soon realised that the rest of the structure was at risk of catching fire and coming down, said Salt Lake City fire spokesperson, Jasen Asay.

The exposed wood of the unfinished building allowed the fire to spread fast through the more than 12-metre structure. Asay said that he could feel the intensity of the blaze from a parking space a block away.

Police set up a perimeter blocking two routes into the area to keep passersby safe while they fought the blaze. "Anytime you have an incident such as this, it certainly is something that attracts attention, not only for people that are immediately surrounding, but passersby as well," said Salt Lake City Lieutenant, Josh Scharman.

Fire fighters doused the roof of the building to keep the embers from catching fire. Their concern also turned to a construction crane that reached over the building, according to Asay. Fire fighters kept the heat from damaging the crane too severely to prevent it from falling over.

The building project had been in compliance and the construction company reported that the building did not have any utilities or source of heat yet. The company added that no workers were at the site on 9 February, said Asay.

The estimated damage is \$1.5 million, according to a fire department news release.▲

► More than 200 homes were flooded from Cornwall, England, to Scotland as vast areas along the region's coastline was affected and roads and fields across the country left under water.

Officials around the country have pleaded with people to keep away

from coastal areas, where waves up to 12 metres high have lashed the land.

In Northern Ireland, high tides and strong winds caused some flooding in coastal areas, but the tide peaked without any major flooding in Belfast.

UK emergency services and the Environment Agency reported that the biggest danger was from people going to the coast to look at the sea.

The EA issued more than 300 lower-level flood alerts and warnings across England and Wales in the first week of January.▲



Illegal miners sabotaged by rival gang

Thirty illegal gold miners were trapped underground by a rival gang in Benoni, Johannesburg

A group of 30 illegal miners were believed to have been sabotaged by a rival gang who took their gold and sealed them inside an abandoned shaft in Benoni in the east of Johannesburg, South Africa, in February this year.

A rescue operation got under way a day after the illegal miners were trapped underground and included local police, Ekurhuleni Metro Police Department (EMPD) and Mines Rescue Services.

Some of the trapped miners, six in total, refused to surface as rescue operations were underway for fear of being arrested, according to the rescue teams. They remained underground in the abandoned shaft as much as two days after being trapped.

Emergency workers first had to employ the use of a crane to shift a slab from the entrance of the shaft allegedly put in place by a rival gang to seal the miners inside the abandoned shaft.

Media reports stated that the miners were sabotaged by the rival gang who took their gold and left the trapped miners for dead inside the sealed shaft.

Rescue workers said a concrete slab and some boulders appeared to have been moved into place recently. ER24 communications manager, Werner Vermaak, said that many people believed that the miners had been trapped deliberately. "It's quite common for rival gangs to close off mines," he said.

The trapped miners cried for help and were heard by a routine police patrol. "Upon further investigation they found the illegal miners trapped beneath several layers of boulders," said Vermaak. "The officials then called for rescue services.

The 30 miners trapped near the top of the shaft had been able to communicate verbally with rescuers and claimed that a further 200 or more were trapped in a lower tunnel.

Ekurhuleni Emergency Management Services senior district manager, Rogers Mamaila, said however, that there were no more than 30 miners trapped in the abandoned shaft.

"We know of the 30 confirmed. The issue of 200, 300, is not true thus far. However, because we are dealing with illegal mining, anything

is possible," Mamaila told a local news organisation.

In a statement, emergency medical service, ER24, stated that the trapped miners were eventually lifted out of the one squared metre hole on 16 February, whereupon they were escorted to a medical station for an assessment of any injuries sustained in the incident.

They were then taken into custody by the local police and the EMPD.

"It still remains unclear if there is any truth in what the miners have told rescuers that several others are trapped in a separate section of the mine. Once the first group have been brought to the surface, rescue workers will make their way down to inspect and search for other miners," read the ER24 statement.

Illegal mining of abandoned shafts is common in South Africa and has been dubbed Johannesburg's second gold rush.

According to South Africa's department of mineral resources, a 2008 study of the gold sector found that an estimated \$509m in revenue was lost each year as a result of illegal mining. ▲

Tonga battered by powerful storm

Hundreds of homes were destroyed by Cyclone Ian in Tonga

A powerful storm in the south Pacific kingdom of Tonga, brought on by the tropical Cyclone Ian, flattened homes and uprooted trees over a weekend in January this year.

Cyclone Ian battered the central Ha'apai islands, with winds gusts of up to 287 kilometres per hour, where the 8 000 residents were worst hit by the storm.

Tonga director of emergencies, Leveni Aho, said that about 600 homes were destroyed with another 400 damaged in the affected areas.

Ian, a category-five cyclone, destroyed about 90 percent of the outer island of Foa, Ha'ano and Mo'unga'one in the Ha'apai Islands chain, according to Humanitarian and aid relief organisation, Oxfam.

More than half of the 1 130 buildings affected by the massive storm were completely destroyed, a UN report has revealed. Of the rest, 34 percent have sustained major damage,

including 13 primary and secondary schools in Ha'apai.

The island of Ha'apai was the worst hit in the disaster, in which one person was killed. About 2 300 people took refuge in emergency shelters as many began to slowly rebuild in the affected islands on the south Pacific.

International relief efforts have ensured that bottled water, food and medicine were delivered to the region. Tonga emergency services officials said that the priority was to rebuild schools and then homes so that the lives of those who were in emergency shelters can return to normalcy.

Oxfam stated that rebuilding efforts in Tonga could take years. "It's not only the people's houses that need to be rebuilt. It's also the infrastructure like the ferry terminal, the port and the roads. It's really badly damaged," Oxfam New Zealand executive director, Barry Coates, said.

After a request from the Tongan government, the New Zealand

Defence Force (NZDF) Hercules military transport aircraft was sent to Tonga with relief supplies, said New Zealand foreign affairs minister, Murray McCully.

The New Zealand Government provided financial aid to relief organisations working in Tonga as well as 300 emergency shelter kits, which can provide temporary shelter for up to 2000 people. New Zealand was also providing additional help with providing clean water on the islands of Ha'apai.

International aid organisations, which have just begun to reach the worst-affected areas, appealed for assistance as it became more likely that damage to the water and sanitation systems could lead to widespread illness.

Cyclone Ian reached a category five cyclone, the strongest type, as it made landfall in Tonga in January this year, reportedly became the most powerful cyclone to hit the region on record.▲

Thailand's political unrest

creating dangerous conditions for rescue workers



Violent political protests in Thailand has put rescue workers' lives in danger

The prolonged and increasingly violent political conflict is putting pressure on rescue workers in Thailand in Southeast Asia, who have to be on hand in dangerous situations to assist casualties of the protests.

The pressure on rescue workers not only comes from the use of deadly weapons, but also from growing mistrust among demonstrators and police.

Ambulances are often stopped and searched by both police and protest guards, said Jakkapong Ruengdet, a 30-year-old rescue worker at the Poh Tech Tung Foundation ambulance service.

Thai police suspect anti-government protesters use the ambulances to carry people to the protest sites, while demonstrators believe the ambulances are used to deliver weapons to help police control the crowds.

"If we're at a People's Democratic Reform Committee demonstration site, then we will be classified as PDRC. If we're with the police, we will be said to have taken the police's side.

"We want everyone to understand that our job is for both sides," said

Ruengdet who has been assigned to work at the Pathumwan district in Bangkok since the beginning of the PDRC's 'Bangkok shutdown' operation on 13 January.

Thailand has been in a state of political turmoil and conflict since as early as 2006, when in a political coup the popular but divisive Prime Minister, Thakson Shinawatra, was ousted on charges of corruption.

A series of public protests have been held over the years since 2006, with the most notable being the series of prolonged 'red-shirt' demonstrations in 2010 held by the opposition to the Democratic Party-led Government, the National United Front of Democracy Against Dictatorship.

The latest unrest in February this year, amid sudden general elections held with the intention of defusing the political crisis. However, anti-government protesters blocked voting across swathes of the country.

Ruengdet said increasing violence at protest sites has put rescue workers' lives in danger.

"It's not a big deal. We'll just die if a grenade is thrown here," said

Jakkapong facetiously, while on duty near the PDRC's Pathumwan district.

Some Poh Tech Tung rescue officials told the Bangkok Post that they had to be on high alert at all times, especially during the night shift when gunshots and explosions were frequently heard.

Poh Tech Tung rescue team supervisor, Surapon Pulkate, said rescue workers had to coordinate with different sectors including anti-government protesters, police, soldiers, Bangkok emergency medical service staff and even owners of nearby buildings to deliver quick and safe care to the injured.

Marking out a route that will get the injured to a hospital in the quickest way possible is vital, said Pulkate. He added that the key is to try to avoid having the route run through protest sites.

Pulkate said that the current political unrest was not as violent as the red-shirt demonstration in 2010. "During the 2010 protest, we put the violence level at three, but now the situation has been categorised at level two.

"However, we still have to monitor the situation very closely, because the targets of the attacks seem to be random, while the previous attackers aimed at protesters," said Pulkate.

Deputy chief of the Ruamkatanyu Foundation rescue team, Boonserm Supphasri, decided to deploy rescue workers outside protest sites to avoid being dragged into the political conflict or viewed as taking sides. The foundation's rescue team and ambulances are based near the sites and are ready to move immediately after receiving calls for help.

A female rescue worker of the Ruamkatanyu Foundation was shot in the stomach on 26 December last year, during the clash between police and protesters at the Thai-Japan Stadium during the PDRC's anti-election campaign.▲

Nine fire fighters lose their lives in building collapse in Argentina

Nine first responders to a fire at a warehouse in Argentina died when the building collapsed

A gigantic fire at a paper file warehouse in the Argentina's capital city Buenos Aires, claimed the lives of nine first responders and injured seven others when the building collapsed in February.

Two more fire fighters were missing in the aftermath of the collapsed building where an archive of bank accounts was destroyed in the fire.

The nine fire fighters and civil defence workers were crushed when a brick wall collapsed on top of a large group of first responders on the sidewalk and street outside, said Argentina's security secretary, Sergio Berni.

"It took them completely by surprise," Berni said. "Some of the injured are fighting for their lives."

The deceased were six fire fighters from the federal police, a volunteer fire fighter and two members of Civil Defence.

Berni said that Iron Mountain, the warehouse facility that caught fire, had its own internal fire fighting team at the site and that the search continued for two missing

employees who may have been trapped somewhere inside.

Buenos Aires City fire fighters, federal and metropolitan police forces, Civil Defence Force and a Buenos Aires medical emergency service crew were working at the site of the tragedy.

Rescuers removed rubble by hand to reach people caught under the collapsed exterior wall.

The blaze at the Iron Mountain warehouse took hours to control and the sprawling building appeared to be ruined despite the efforts of at least 10 squads of fire fighters.

The destroyed archives included documents stored for Argentina's banking industry, said Buenos Aires security minister, Guillermo Montenegro.

He said that the cause of the fire wasn't immediately clear. "There are cameras in the area and these videos will be added to the judicial investigation to clear up the motive of the fire and collapse," Montenegro told local media.▲

Rescue helicopter crashes off Baltic Sea coast

A rescue helicopter has crashed during a training flight off Germany's Baltic Sea coast, killing three people on 28 February this year.

The aircraft's operator, DRF Luftrettung, stated that one person on board survived the crash and was being treated at a hospital.

The helicopter was based at Guettin airbase on Ruegen Island in northeastern Germany.

Divers recovered the bodies of one of the pilots, a doctor and a rescue assistant overnight.

There was no immediate word on the possible cause of the crash.

The incident occurred at about three miles east of the peninsula Fischland-Dar-Zingst. The helicopter was on a training flight in rescue operations at sea.▲

Thousands at risk of flooding in UK amid rising River Thames water levels



The River Thames in southern England reached its highest levels in February this year

Adverse weather conditions continued in southern England as many residents along River Thames were evacuated and thousands were more at risk as heavy rainfall persisted and water levels rose in February this year.

On 10 February, UK media reports stated that fourteen severe flood warnings were in place in Berkshire and Surrey, while two remain in Somerset in southern England.

The UK's Environment Agency reported that hundreds of homes

and businesses along the lower River Thames were under threat of flooding in February this year.

Several of the Thames gauges showed that the river was at its highest levels since being installed in the 1980s and 90s.

Fire crews, who had been rescuing people from their homes in the Staines-upon-Thames region, said they never experienced waters so deep or known of a flood rescue operation on this scale.

Surrey Police said more than 150 people had been rescued from flooded homes over two days from 8 February, 2014.

Thames Valley Police declared a 'major incident' in east Berkshire and a major incident was also declared in Surrey by the county's police force.

The Environment Agency said it had never issued as many severe flood warnings and that many areas had seen more than double their average rainfall.▲



Poor countries account for 90 percent of global traffic fatalities

The toll of traffic accidents is rising in poor countries as is evident by the number of people that die on the road every year. The current global death toll is 1,24 million people and this is course to triple to 3,6 million per year by 2030.

In the developing world, it will become the fifth leading cause of death, leapfrogging past HIV/AIDS, malaria, tuberculosis and other familiar killers, according to the most recent Global Burden of Disease study.

The victims tend to be poor, young and male. In Indonesia, the toll is now nearly 120 dead per day and in Nigeria, it is claiming 140 lives each day. This global killer is our most necessary accessory, the essential thing that gets us from here to there - the motorised vehicle.

Poor countries account for 50 percent of the world's road traffic, but 90 percent of the traffic fatalities. The costs associated with these deaths are a 'poverty-inducing problem',

according to World Bank traffic safety specialist, Jose Luis Irigoyen.

He said that it was costing 'on average between one and three percent of gross domestic product' (GDP) in low- and middle-income countries, which is an amount that can offset the billions of dollars in aid money that these countries currently receive.

In 2010, the UN General Assembly adopted a resolution calling for a Decade of Action for Road Safety. The goal is to stabilise and eventually reverse the upward trend in road fatalities, saving an estimated five million lives during the period.

The World Bank and other regional development banks have made road safety a priority, but according to Irigoyen, donor funding lags 'very far below' the \$24 billion that has been pledged to Global Fund to fight AIDS, tuberculosis and malaria.▲



Gas leaks and explosions at a residential complex in US city

An explosion at a townhouse complex in New Jersey, US, killed one person and injured seven more on 4 March this year.

A gas leak explosion at a townhouse complex in New Jersey, US, killed one person and injured seven others

The explosion was sparked by a gas leak in the Ewing Township in New Jersey, causing damage to 55 units in the townhouse development, with approximately 10 units being destroyed.

A spokesperson for the Capital Regional Medical Centre in Trenton, New Jersey, said that two of the injured persons suffered traumatic injuries in the explosion.

Television footage showed damage to several units at the development in Ewing, outside Trenton and widely scattered debris. Flames could be seen shooting up from the ground, apparently fed by a gas line.

Public service electric and gas company, PSEGs employees were held at the Capital Regional Medical Centre for observation with injuries ranging from broken limbs, soft-tissue injuries and concussions. One worker underwent surgery for his injuries, according to hospital personnel.

The seven people injured in the explosion were all employees of PSEG. Officials said none of the injuries were considered life-threatening.

PSEG stated that it was conducting investigations at the site of the explosion.

US authorities said that they were still working to establish the ignition point in the blast, but may never be able to do so. At least 20 homes were uninhabitable following the explosion, though residents were allowed back in to retrieve medicine, clothing and other belongings.▲

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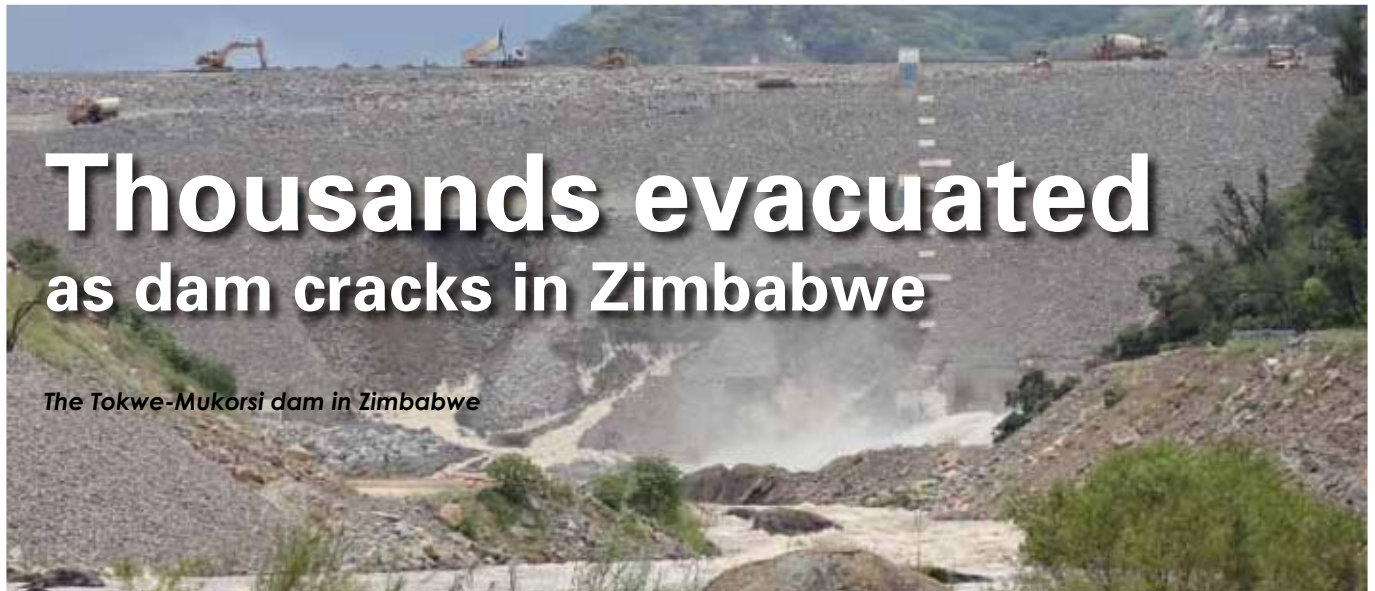
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Thousands evacuated as dam cracks in Zimbabwe

The Tokwe-Mukorsi dam in Zimbabwe

Zimbabwean authorities began evacuating thousands of people in the southern part of the country threatened by a nearby dam that partially collapsed amid torrential rains in February this year.

At least 4 000 families faced the risk of flooding, with some requiring urgent evacuation, after a wall of an upstream dam partially collapsed, said Zimbabwean officials.

The Zimbabwean Government deployed more than 20 rescue vehicles to relocate those in danger. It also urged communities downstream the Tokwe-Mukorsi Dam in central Masvingo Province to move two-to-five kilometres from the Tokwe River and seek higher ground.

"At least 400 families need to be evacuated immediately and a further 4 000 would be moved in due course," said local government minister, Ignatius Chombo.

Tokwe-Mukorsi Dam is being built by Italian company, Salini Impregilio. The project, with a cost of \$156 million, is designed to boost the drought-resistance of a region that normally receives insufficient rainfall.

The dam wall has developed cracks and shifted slightly due to rising water levels over the past few days, media reports said. The dam is said to hold 1,8-billion cubic litres of water when it is completed.

Zimbabwe has been receiving rare heavy rainfalls over the past week, raising the risk of flooding in low-lying areas of the country. Some families in Masvingo said their makeshift houses had collapsed in the downpour.

Masvingo's deputy administrator, Godern Chipika, said the Red Cross was already on the ground, distributing tents to displaced families for temporary shelter.

Zimbabwean President, Robert Mugabe declared the flooding a state of disaster.

According to a Zimbabwean news agency, the president's declaration would enable Government to mobilise resources to assist affected families that have had their homes, food and other belongings swept away.

The Meteorological Services Department has warned that a deep and very active low-pressure system that entered Zimbabwe rapidly last week was bringing more heavy rains to most parts of the country.

The Zimbabwean Government had beefed up aid for the flood victims and increased the number of trucks to relocate families with rescue helicopters and boats expected to be deployed to assist locals in Masvingo Province.▲

Snow leads to 100-vehicle crash on US highway

One person died and 30 others were injured in a massive pileup on a highway in Denver in the state of Colorado, US, after a band of heavy snow moved through the region on 1 March 2014.

According to local police, more than a hundred vehicles were involved in crashes along a roughly three

kilometre stretch of highway after a short but intense burst of snow slammed the area. The northbound lanes of the five-lane highway were closed for several hours.

The injured were taken to nearby hospitals. Drivers and passengers who were not hurt were put on a city bus to speak with accident investigators

and some wrecked cars were towed to a nearby high school.

Meanwhile, about 100 snowploughs and four large tankers with de-icing fluid were busy clearing roads throughout Denver, according to the Colorado Department of Transportation.

US meteorologists said the storm was part of the same system that has saturated California and slowly moving across the West en route to the Plains and Mississippi Valley on 2 March 2014.▶

Boulder smashes into train in French Alps

A falling boulder hit a passing train in the French Alps, killing two passengers



Two women were killed when a falling boulder hit a passing train in the French Alps on 8 February this year, leaving one of its carriages dangling precariously off a steep, snow-covered embankment.

Eight people were injured in the accident, which took place as the train travelled from the coastal city of Nice, France, along a narrow, winding and sometimes steep track of up to 1 000 metres above sea level.

A 49-year-old Russian woman was killed along with an 82-year-

old French woman living in the Alps region.

One of the injured is said to be in a critical condition, while the others, including the driver, are reported to have sustained lighter injuries.

Fire fighters from around the mountainous region were drafted in to help in the rescue operation in a remote and mountainous area difficult to access due to the snow and steep slope.

A total of 110 fire fighters and 32 vehicles were deployed, as well as

two helicopters. They are said to have encountered difficulties in reaching the accident because of heavy snow and the isolated location.

The train travels on a track that regularly receives snow and rockfalls but regional transport official, Jean-Yves Petit, said that even in winter it is considered safe.

The railway, known as the Train des Pignes, is popular among tourists, taking them on a picturesque 144-kilometre journey from the sea to the mountains of Haute-Provence, a popular ski resort location in France. ▲

► “We’re on the front leading edge of it, so there’s some moisture coming up,” said National Weather Service meteorologist, Jim Kalina. He said that this, combined with a cold front that moved into Colorado on Friday 28 February 2014, making for whiteout conditions and slick roadways across Colorado state.

Highway officials closed the westbound lanes of another Interstate roadway west of Denver after treacherous road conditions led to numerous accidents. ▲



A major highway crash involving 104 cars were involved in a pile-up on the US Interstate 25

An explosion at a balls bearing plant in New Hampshire, US injured multiple workers

Major explosion

at New Hampshire industrial facility

An explosion at a ball bearing plant in New Hampshire in the northeastern region of the US in February injured at least 13 people, with two being critically injured.

Peterborough Fire Department spokesperson, Eric Bowman, said that two critically injured people were airlifted to Massachusetts hospitals for further treatment. Four others were described as being in serious condition.

Monadnock Community Hospital spokesperson, Laura Gingras, told the Associated Press that 13 people were treated at the hospital. Six of the injured were released on the same day they were admitted.

A spokesperson for the company that runs the ball bearing said that workers had been injured, but the

injuries were not believed to be life-threatening.

"At this point we don't know what caused the explosion, but we know it was an in-house issue," said Kathy Gerrity, assistant to the president at New Hampshire Ball Bearings Inc. "We are rolling out emergency procedures."

Fire fighters and emergency workers in the town of Peterborough in New Hampshire responded to the incident, reacting to four alarms.

The incident was deemed a masscasualty incident by emergency workers. News alerts from various news agencies indicated there were more than 100 fire fighters on scene and more than 10 injured.

Gerrity says it's unclear what caused the explosion Monday afternoon at the ball bearing plant.

Bowman said that there were no signs of criminal activity and authorities were describing the explosion as an 'industrial-related incident'. He acknowledged that the plant used potentially explosive chemicals for processing, but did not specify any types of chemicals.

The southwest New Hampshire plant employs 700 people. Gerrity says she's unsure how many people were inside when the explosion happened, but there are usually about 450 working around that time.

The explosion, which was reportedly felt over a kilometre away, blew out most of the windows on the first floor of the plant. Fire fighters were assessing the building's structural integrity and the investigation was expected to carry on a day after the incident. ▲

One survivor as 77 killed in Algeria plane crash

Algeria's Ministry of Defense says 77 people were killed and one man survived after a military transport plane crashed into a mountain in eastern Algeria in North Africa.

A statement by the Ministry of Defense stated that the C130 Hercules turboprop was carrying 74 passengers and four crew members on 11 February this year, citing poor weather as the reason for the crash.

After radio and radar contact with the flight was lost at 11h37 following which three helicopters were sent to find the plane. The ministry stated that the aircraft slammed into Mount Fortas, 50 kilometres from the flight's destination city of Constantine in Constantine Province in northeastern Algeria.

Initial reports from both Algerian government officials and Algerian

media had said the plane was carrying 99 passengers.

The lone survivor, a soldier, suffered head injuries and was treated at a nearby military facility before being flown to the military hospital in Algiers.

Civil defence officials at the snowy crash site said the plane broke into three parts and women and children were among the dead. ►

Gas-freight train derailment in central Russia

Thirty-two carriages of a liquefied gas train derailed causing a massive blaze in Kirov, Russia

A freight train containing liquefied gas derailed in the Kirov Region, central Russia in February.

A dozen carriages burst into flames at the site, where 32 carriages of the 72-car train derailed. More than 700 local residents and workers from a nearby factory had to be evacuated from the fire zone as a result.

The blaze was localised after nearly six hours of fire fighting. However, it spread to 30 garages near the railway line and one warehouse was also engulfed. A nonresidential wooden house completely burned out and about 30 garages were set on fire. No deaths or injuries were

reported, Russia's Emergencies Ministry confirmed.

The fire was assigned fourth, the highest complexity level in Russia. A task force of 340 people and 100 equipment units were engaged to the scene of the accident. Among them were two fire fighting trains and over 15 fire teams were working at the site.

People in the immediate vicinity of the train explosion were evacuated and placed in temporary accommodation points. The area was cordoned off as a precaution.

Residential apartments were without electricity and gas supply following

the massive blaze from the carriages. The accident caused problems with transport connections in the region. Arrivals were delayed and several train itineraries were changed.

The Emergencies Ministry dismissed fears of ecological problems in the region resulting from the accident. The liquefied gas leakage did not reach nearby Vyatka River, said the head of regional department of EMERCOM, an organisation engaged in humanitarian and rescue activity.

Experts have been taking water samples every 15 minutes and no water pollution has been detected, hence there was no danger to people.▲

► Algerian military commander, Farid Nechad, who was coordinating recovery efforts, said that 55 bodies had been recovered hours following the incident, but conditions at the crash site were difficult.

Algerian president, Abdelaziz Bouteflika, announced a three-day period of mourning, calling the soldiers who had died 'martyrs for the country'.

The worst plane crash in Algerian history occurred in 2003, when 102 people were killed after a civilian airliner crashed at the end of the runway in Tamanrasset Province. There was also a single survivor in that crash.▲



Algerian military plane crashes killing all onboard save one soldier

Philippines battered

by another destructive tropical storm



A state of calamity was declared in different regions in Philippines after Tropical Depression Agaton hit the country



Tropical Depression Agaton caused heavy flooding in Philippines, displacing 260 000

Atropical depression that has brought flash flooding and landslides to the southern Philippines, has left 45 people dead and displaced more than 260 000 in late January this year.

According to Philippines authorities, nearly 900 000 people have been affected by the heavy rains brought by Tropical Depression Agaton, having lashed the country for days.

Emergency workers evacuated thousands of people across the southern Philippines on 21 January, including many already made homeless by a typhoon in November, after three days of rain flooded towns and farmland.

Hundreds of survivors of Typhoon Haiyan were forced to flee the emergency shelters, when it was damaged or destroyed on the eastern central island of Samar.

Tents collapsed under the weight of the rain and emergency plastic sheets were torn away, reported relief organisation, Oxfam.

The country's national disaster agency, National Disaster Risk Reduction and Management (NDRRM), reported that more than 55 000 families took refuge in emergency shelter in 585 evacuation centres.

Among those affected are survivors of November's Typhoon Haiyan, which left millions homeless in the Philippines, according to Oxfam.

More than 200 000 were taken to shelters as flood waters rose over the weekend beginning 19 January, but hundreds were still stuck on the roofs of their houses on 21 January, said NDRRM executive director, Eduardo del Rosario.

Oxfam's Philippines country director, Justin Morgan, said in a statement that thousands made homeless by Haiyan had been evacuated from rain-collapsed tents and flooded makeshift shelters to avoid being left exposed to the elements by Agaton, including in the ravaged city of Guiuan, which was the first town in Haiyan's path.

On top of the official death toll of 45, the NDRRM said 68 people were injured and eight missing. Most of the deaths occurred in the regions on the southernmost island of Mindanao.

Most of the deaths were by drowning or in landslides, the disaster agency noted.

More than 800 houses have been destroyed by Agaton and nearly 1 300 partially damaged, while 50

roads and 25 bridges have been rendered impassable by flooding.

The current onslaught of bad weather began when a low pressure area southeast of Guiuan developed into a tropical depression, with winds reaching 55 kilometres per hour near its centre.

A state of calamity was declared in Agusan del Norte and 15 other towns in a few areas in Mindanao, even as the local weather bureau lifted alert levels as the storm weakened. After drifting east and west over the south of the country, Agaton weakened to become categorised as a 'low pressure area'.

Over the last decade, the Philippines has consistently ranked in the top five most disaster-hit countries, along with China, the United States, India and Indonesia, according to the Centre for Research on the Epidemiology of Disasters (CRED).

Sitting on the western rim of the Pacific Ocean, the Philippines is situated in the most active area for tropical cyclones, owing to the surrounding expanse of deep, warm ocean water.

Many buildings in the Philippines are not built to withstand a heavy battering from the elements.▲



Light aircraft crash lands at Lanseria Airport

A light aircraft crash at the Lanseria International Airport, north of Randburg and Sandton in Johannesburg, South Africa, resulted in the death of three people on 3 February this year.

Lanseria International Airport manager, Gavin Sayce, confirmed the death of three people after a King Air 90 light aircraft crash landed at the privately-owned Johannesburg airport.

"Unfortunately all three people on board, two passengers and a pilot are dead. It is too early to speculate about the cause," said Sayce.

According to media reports, the plane crashed and burst into flames while attempting to land in bad weather.

The plane had taken off from Rand Airport in Germiston, east of

Johannesburg and planned to land at Lanseria Airport. The aircraft came down in early morning rain and mist conditions on a cleared section of ground and completely missed the adjacent runway.

Lanseria International Airport spokesperson, Claudette Vianello, said the aircraft burst into flames on impact. "There's speculation that it was a controlled flight into terrain crash," said Vianello.

In November 2013, Lanseria opened a new runway parallel to the existing one. The original runway has not been in use and is currently being ripped up.

The heap of gravel into which the plane crashed, about the size of a house, was a consequence of the earthworks underway at the airport.

The speculation is that poor visibility, owing to the inclement weather, caused the pilot to miss the runway.

Upon realising the aircraft was in danger of hitting a nearby building at the airport off the runway, the pilot then aimed for the gravel heap.

According to the Aviation Safety Network, however, the craft was believed to have been disabled by a fire. Media reports suggest that onlookers claimed to have seen smoke coming from the plane before it crashed.

Emergency medical care and response service, ER24 spokesperson, Werner Vermaak, told a local news services that the company's crews did not mention any specific issues in making their way to the crash site.

"However, responding to the incident was a bit trickier than usual due to the heavy downpour and slow-moving traffic," stated Vermaak.

"We had emergency vehicles responding from Sandton, Roodepoort and Paulshof," he said.

Airport management confirmed that the passenger and two crew members were all South Africans. An investigation is being conducted by the Civil Aviation Authority (CAA).

Lanseria spokesperson, Claudette Vianello, said the light aircraft was registered as ZS-CLT. ▲

Fire destroys locomotive of luxury passenger train

A locomotive of the internationally renowned Blue Train caught fire and burned out on 8 February this year.

The locomotive caught fire as the luxury Blue Train was leaving Kimberley in a southerly direction, according to reports from a local news service in Kimberley.

"This particular rail line is parallel to Landbou Drive and the smoke from the fire could be seen from a distance," stated a local newspaper report from Kimberley.

Transnet Freight Rail spokesperson, Sandile Simelane, said there were no reported injuries and an alternative

locomotive had been brought in. The cause of the fire was still to be investigated.

Local emergency services arrived on the scene soon after the incident, which included the Sol Plaatje Local Municipality Emergency Services in Kimberley, as well as emergency medical service, ER24.

Paramedics from ER24 Kimberley provided medical standby, although no one was injured in the blaze that was believed to have started at 03h00 in the early hours of the morning.

In March 2013, another fire broke out on the Blue Train in which six

coaches of the train were damaged in the fire at a station in Pretoria. Fire fighters from Tshwane Emergency Services responded to that fire, which was believed to have started in the kitchen. The interiors of three coaches were totally destroyed in that incident.

In the Kimberley fire incident earlier this year, media were kept at bay as emergency workers attended to the fire on the locomotive.

Security officers at the incident prevented photographers from getting close to the scene of the fire as 'they were on Transnet premises', reported a local newspaper in Kimberley. ▲



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Next level safety in turnout gear

Safe Design's Gary Schofield demonstrates the fire resistant outer shell layer

Canadian turnout gear solutions provider, Safe Design, hosted a series of presentations at fire departments across South Africa, focusing on the 2013 National Fire Protection Association (NFPA) standards on personal protective equipment (PPE).

Safe Design international representative and Canadian-resident, Gary Schofield, delivered the presentation at the Ekurhuleni Municipality's Boksburg Training Centre in conjunction with local partners in South Africa, First Attack Fire and Equipment.

Fire and Rescue International attended the presentation at the Boksburg Training Centre, where Schofield showcased underwriter laboratories (UL) and NFPA-certified turnout gear. This included the G-Xtreme fire suit by Globe Turnout Gear that provides protection against biological and blood-borne pathogens.

Globe Turnout Gear has evolved in its business offering, as it now manufactures not only fire suits, but

a range of protective gear, including footwear.

Schofield discussed fire fighter statistics in the US, stating that 38 percent of fire fighter deaths were as a result of cardiac death. "It is important to build a suit to address this."

The G-Xtreme is a newly developed fire suit that provides a solution to a number of fire fighter safety concerns with the idea of reducing risk.

The fire suit enables greater fire fighter safety and is designed to reduce risk by improving physical condition, improving breathability and it enhances ergonomics and training efficiency, said Schofield.

He noted that proper selection of a fire suit by fire fighters, as well as maintenance and care are other factors that will improve fire fighter safety and the effectiveness of turnout gear.

"In terms of flame resistant clothing, it is important to know what you are wearing beneath the gear. Most severe burns are caused by ignited clothing," noted Schofield.

There are three types of fire suit burns and a fourth that is a combination of the following; stored energy burns, steam burns and compression burns.

Stored energy is a personal protective equipment (PPE) hazard as garments have the ability to store heat. Steam burns are brought on by inadequate moisture management, while compression burns are caused by a lack of thermal reinforcement in fire suits and conductive heat exposure results from compression.

Importance of protective apparel

Schofield discussed the benefits of using adequately protective apparel, demonstrating the design benefits of the G-Xtreme turnout gear.

The suit consists of different layers taking into consideration the risks faced by fire fighters and this includes an outer shell that is resistant from direct flame and protective internal layers from rips and tears. The moisture barrier is another layer in the suit that provides a barrier to liquid water, chemicals and blood-borne pathogens. There is also a thermal layer that provides thermal insulation by trapping air. ▶

► The fire suit takes the the law of thermodynamics into consideration, which implies that heat energy follows the path of least resistance. According to Schofield, the outer shell provides 27 percent of protection, while the thermal and moisture barrier offers 73 percent protection.

Third party testing

Manufacturers of turnout gear have to be compliant with international standards organisation (ISO) and other testing centres in order to be certified.

“It is important that the end user knows what he is getting. It is important to be ISO compliant,” said Schofield.

Users of turnout gear can have insight into the manufacturer and certification of products offered by manufacturers like Globe Turnout Gear, which lists on its products that it is certified with the ISO and UL. It also lists its compliance with the NFPA PPE requirements and standards.

“Suits go to underwriter’s laboratory for testing. Having a third party suiting testing provider reinsures user that the suit purchases are what is expected, enabling neutral testing,” said Schofield.

Schofield discussed the changes in the NFPA’s PPE standards and requirements, mentioning that the US fire protection body’s standards are modified every seven years. He noted the revision of the 2001 NFPAs PPE standards for 2001 made in 2007, which calls for ultraviolet tests, drag rescue device and conductive compressive heat resistance NFPA labels.

The drag rescue device is placed on the inside collar of all Globe Turnout Gear to provide a rugged drag device for distressed or injured fire fighters in a fire incident.

The NFPA labels are very important, stated Schofield. He added that the end user ‘has a lot of things to look at’. These include identification number, manufacturer date, UL classified marks, manufacturer name and fire and product brand name.

Thermal specifications

Thermal heat loss (THL) and thermal protection performance (TPP) tests



Ekurhuleni EMTs Stewart Scott testing Globe Turnout Gears footwear



The benefits of NFPA certified fire suit was demonstrated by solutions provider Safe Design



Ekurhuleni Emergency Services head of logistics and proactive services, Ryno van Vuuren

are conducted on all three layers of the garment together.

THL is a measurement of the breathability of the garment, while TPP is a measure of the rate moisture vapour flow through the three protective layers.

There is, in most systems, an important inverse relationship between TPP and THL. The optimum values for each are needed to achieve both comfort and protection. Generally, as TPP goes up THL comes down and as THL goes up TPP comes down. The goal is to balance the two values.

Schofield said that the Globe Turnout Gear marketed by Safe Design currently has a 33 percent market

share in the US and a five percent international market share.

While there is no product distribution in South Africa, since the requirements of local fire industry is different, Safe Design is looking to introduce the Globe products to the industry.

Schofield noted that risk assessment is provided with each fire department and this includes specifications on the preferred types of fabric.

Safe Design has adopted a fire academic programme that is an agreement with fire fighter training schools for use of turnout gear in exchange of feedback on the performance of the gear. “We are looking at doing this in South Africa,” said Schofield.▲

*Alco-Lite engineered
the first aluminium fire
ladder in 1930*

Fire fighting ladder heritage

Aluminium fire fighting ladders offer fire departments the advantage of being low maintenance, light weight, durable with high life expectancy. South African fire fighting equipment supplier, Fremtac Fire and Rescue, is a supplier of Alco-Lite aluminium fire department ladders. Jimmy Croucamp, owner of Fremtac Fire and Rescue, says that the Alco-Lite range of ladders is extensive and covers all applications from access ladders, truss ladders, pumper and compact pumper ladders, combination and folding ladders, attic ladders and boom ladders.

Since 1930, fire departments throughout the world have relied on Alco-Lite fire fighting ladders. All Alco-Lite fire department ground ladders meet or exceed US National Fire Protection Association (NFPA) standards and are completely field repairable. Because rungs become damaged or broken, the Alco-Lite rungs are designed so you can easily replace it using common tools. Two people can replace a rung within 15 minutes and can be quickly and simply removed on location without the need for special tools, welding, or training.

The Alco-Lite name has been synonymous with quality, dependability and service.

In 1930, Sam Carbis invented the aluminium fire ladder and founded a new industry. The Aluminium Ladder Company began producing fire ladders at the request of the Oslo fire department. They were in need of a large extension ladder, which would not be too heavy for their fire fighters to lift; soon an industry was born.

Today, almost 75 years later, the Sam Carbis Solutions Group is still

manufacturing the ladders that fire fighters depend on to protect them while they protect and serve. The range includes the complete line of aluminium and fibreglass ladders that will stand the test of time.

The Sure-step II access ladder is a durable, operator-friendly ladder that provides safe access to the top of any apparatus. The ladder stores in a low profile position parallel to the truck body. To use, the bottom section simply flips down, rotating the ladder to a comfortable ten degree climbing angle. When finished, the bottom section flips up causing the ladder to return to a vertical stored position. The cam-action design locks the ladder in both the working and stored position, providing a simple one hand operation. It also features heavy-duty stainless steel stanchions, stainless steel hardware, heavy-duty mounting brackets, cast aluminium, slip resistant tread, non-slip handrail and heavy-duty gas struts.

The truss construction ladders from Alco-Lite have been a tradition in the industry since their inception by the founder. All TEL and TEL3 extension ladders are equipped with halyards. The TRL model nests in the base section of TEL or TEL3 models. It is designed for maximum strength to weight ratio and is fitted with an oversized pulley for easy operation.

Alco-Lite pumper ladders have been the standard in the industry since 1930; engineered and manufactured to exacting standards for use on general fire fighting trucks and pumper trucks.

Special widths for replacement ladders are available upon request. All PEL and PEL3 extension ladders equipped with halyards. The roof ladders are equipped with reinforcing

brace between hooks for increased rigidity. The Alco-Lite pumper ladders are also equipped with high strength steel butt spurs, rounded aluminium end caps for increased durability and an oversized pulley for easy operation. The pumper ladders are also available in fibreglass.

The combination ladders are functionally engineered for ease of operation as a step or extension ladder. It is ideal for spanning fences, accessing windows, or as a self-supporting ladder set up in the centre of a room. The combination ladders convert easily to extension ladders or 'A' ladders and are ideal for spanning a fence, working on a light ballast, or in the centre of a room. It is accessible from both sides and has a special heavy-duty 'A' bracket that allows for quick, easy set-up. Its compact design is easy to manoeuvre in tight hallways and stairwells.

Alco-Lite folding ladders offer the ultimate in portability for low to medium height access. Its compact design easily fits on any service vehicle. The hinge locks the ladder into open position. It is lightweight for easy carrying and folds laterally into 13,3cm wide compact unit for easy storage and transportation. It is designed for maximum one-man load and is equipped with handles for safe, easy manoeuvring and set-up.

The 'Fresno' style Alco-Lite attic ladders are ideal for use in accessing small attic openings or other medium height close quarter areas.

Alco-Lite's engineered telescoping boom ladders have been the standard ladder of choice for many fire apparatus manufacturers for decades. These ladders are manufactured to exact standards to ensure proper integration with all kinds of equipment. The company will produce custom ladders to your specifications or have its engineers design one for you. The engineered telescoping boom ladders booms up to five sections to a height of 30,5 metres and is available with either fixed or fold down handrails.

The standard NFPA requirements are to have all fire ground ladders serviced and checked on an annual basis.▲

The most versatile ladder is the 10,5-metre aluminium extension ladder



Ground ladders

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

Modern fire services are confronted by differing challenges than they used to in the past. Most services are more focussed on the provision of emergency medical services and community awareness programmes. Personal protective clothing has also evolved to the extent where fire fighters enjoy a higher level of safety and are able to advance further into fires than before. This new approach should never preclude us from paying attention to our bread and butter operations and their strategies and training to do the basic tactics properly to support such operations.

The basics will include, among others, ventilation, forcible entry and ground ladder deployment.

Ladder considerations at size-up

These basics will always form part of the considerations of the first arriving incident commander at a structural fire. The incident commander should know the skill levels of his/her crews and how they will be able to perform the fire ground tasks assigned to them. An operational fire ground should never be a training ground. The deployment of ladders on a fire ground should be for four objectives: safety, rescue, access and ventilation.

Safety: Sufficient laddering of escape routes will allow fire fighters to get out of a structure if other routes are cut off.

Rescue: The quickest and safest way to remove occupants from a structure might be by means of the fire service's ladders.

Access: Accessing various parts of a structure could be necessary for interior attack, application of class A foam or the insertion of a reconnaissance team.

Ventilation: This will depend on the type of ventilation to be done and the way it will be done. A number of ladders will be necessary if vertical ventilation is attempted on a heavy tile roof (as is common in many South African residential structures), which will require the removal of tiles.

When doing the size-up, the incident commander should consider the above strategies and decide on where to place the ladders, how to place them and who should place them. I have in past articles advocated a two-plus-one response (two engines and one ladder truck) to structural fires. When you consider that your truck company has a myriad of tasks to perform and you still expect them to deploy a range of ground ladders all around the structure, you will appreciate the need to identify the laddering needs and how they will be addressed and practice this with the resources you know you will have.

Placement of ladders should be away from access and exit points and should not be placed over windows. Should a fire vent through that window it could compromise the usefulness of the ladder.

Many instructors will tell you that a ladder should be placed with three rungs over the structure or through the window. This is a good rule of thumb but should not be seen as an absolute necessity.

What you want to achieve is two things: (1) the ladder must be so placed that fire fighters working in its vicinity can see it (and access it) without any trouble. (2) Ladders placed in windows should take into account the size of the egress route and not impede any escape routes.

Some simple tips for placing ladders in the types of scenarios you may encounter on a fire ground are:

- Placed at a window - Tip shall be level with window sill.
- Placed at a roof - Tip shall be at least 0,6 metres above the roof or parapet.
- Alongside a fire escape on a building wall - Tip shall be 0,3 to 1 metre above the fire escape railing.
- Against a fire escape - Tip shall be slightly above the fire escape railing. ▶



How can an aerial assist you more than a ground ladder on a one storey?

► Ladders should be on a stable ground when in use and it is good practice to carry a limited amount of wedges or wood cribbing to stabilise the surface on which the ladder will be placed.

Fire fighters should take the trouble to look at the structures within their own station areas and consider the challenges specific to those areas.

The set up

Rapid placement of ladders will allow your attack teams to be more aggressive. Aggressive fire fighting requires an aggressive mind-set from all crews on the fire ground. If the tactics don't support the strategy, the strategy will fail.

If an engine company expects ground ladders to be in place early on in the incident, make sure that this is the case. Their tactics will be aligned to this and failure to adapt ground ladder placement to the fire attack strategy will waste the precious time you have to initiate your rapid attack effectively.

So if you only have a limited response crew with many tasks to perform a method you can employ is the 'ladder drag'. This entails the placing of all auxiliary equipment such as pike pole's and forcible entry tools

on the inside of the ladder and then carefully lifting and dragging the ladder in place. This can be achieved by one fire fighter. You can even go as far as attaching your hook ladder to an extension ladder by means of its hooks (although this will take more than one person). Before I hear the screams of outrage, let me make it clear that the drag needs to be done carefully and slowly. Obviously, this can only be done if the ladder placement is not the priority route for initial access into the structure. In this case, it will be necessary to change your truck crew's responsibilities and prioritise the setting of the ground ladder.

Ladder placement, like ventilation, is not limited to extending ladders at the start of the fire attack and then considering the task complete. As the incident progresses the need for additional ladders might become necessary. Incident commanders and sector commander should continuously evaluate the situation and call for additional ladders in good time. If ladders are going to be removed from one point and placed somewhere else, it must be communicated to all crews who might be affected. You don't need someone to be looking for an escape ladder only to find that it is no longer there.

Rescue

Ground ladders can be used in various rescue situations. In most cases, ladder rescues can be safely achieved with two fire fighters. Generally, the senior fire fighter will carry the butt end of the ladder and ensure the ladder is placed a proper distance away from the building and clear of any obstructions.

Before entering the structure through a window, make sure it has been cleared of any glass shards that could cause serious injury by using a Halligan tool to run along the base of the window sill, therefore clearing any remnants of the window that may still protrude. Once this has been done, the first fire fighter to enter the structure through this route should test the stability and height of the inner floor by placing his/her foot on the floor (always keeping your weight on the ladder in case of a floor collapse). After finding the floor (and testing its stability), you can swing into the structure and move clear of the entrance to allow the next person in.

Should a ladder be placed and victims are able to access it, they might attempt a self-rescue. Discouraging a victim to climb down might not be a good idea and there is a good chance that the person will ignore you and continue the descent. Try to ►



The use of ground ladders to reach the peak of the roof

► 'talk' the person down by providing short, succinct instructions on how to move down and try to rapidly move toward the person to try and assist them. This should be done slowly and with caution. The best technique for this is for the victim to face the ladder and for the fire fighter to have both hands around the ladder beams. If the victim panics or starts to fall, the fire fighter can simply pull himself against the ladder, thereby pinning the victim.

In a situation where multiple victims have to be rescued, it is critical that enough resources get dedicated and that this part of the operation is prioritised. Ascending and descending a ladder multiple times to remove panicking victims from a structure is demanding work, both mentally and physically. Make sure that rescuers do not overwork themselves and that sufficient numbers are available for the crew rotation. It will be difficult for fire fighters to adequately prioritise victims for removal inside a structure involved in fire. Panicking victims might attempt to exit the building by various means and this could tie up resources, which you will need to respond to. Not an easy situation

and one that will tax the incident commander and his/her staff.

Aerial apparatus

Your best, biggest and shiniest ladder is your aerial apparatus that cost your department a small fortune and was not designed to sit in your engine bay while most of your other vehicles are out fighting fires.

The aerial apparatus should be placed in the most advantages position, normally the front of the building, to enable effective deployment. If you can cover two sides of a building, it would be ideal. It can result in cutting down on the additional ladders needed to cover the rest of the building. Remember that despite their versatility, aerial devices can't do everything and that is why ladder trucks are designed to carry various other ladders. Learning to use these ladders in conjunction with your aerial device, will give you the kind of versatility that you might need on a multiple alarm, multiple victim fire.

The 10,5-metre ladder

The National Fire Protection Association (NFPA) requires a set number of

ladders to be carried on various fire apparatus. The most versatile will be the 10,5-metre aluminium extension ladder. Its light frame construction, load capacity and variable reach will make it the workhorse of most fire crews. Aluminium ladders give you the following advantages:

- Aluminium ladders are generally lighter in weight and stronger than comparable wood ladders
- Being made of a high tensile, heat treated aluminium alloy, it can sustain daily wear and tear very well
- The aluminium will not weaken with age. It has a long life expectancy
- Aluminium ladders, in general, are tough and could dent but will not chip or crack when subjected to severe impact nor will it fail suddenly because of overloads
- No protective finish is required on aluminium ladders, as it will not dry out and withers with age or sunlight exposure

The 10,5-metre ladder will immediately give you the ability to access the roof of a single storey structure, the windows of a two or three storey occupancy, if you consider that the second floor ►



All-inclusive emergency care valued by private EMS organisation

Vaal Emergency Care founders, Marius and Elsabe Venter

Established in 2006, private ambulance service, Vaal Emergency Care, serves northern Free State and southern Gauteng, South Africa, providing prehospital emergency care to all, including nonmedical aid patients, says Vaal Emergency Care founder, Marius Venter.

Vaal Emergency Care was started to supplement the provincial ambulance service in the Sasolburg area. Venter says that there was a need for an 'extra service provider' as the provincial health department was the sole ambulance service in the Free State.

Today, there are three other private ambulance service in the area

and along with Vaal Emergency Care, these serve the following towns: Deneysville, Heilbron, Parys, Sasolburg, Vanderbijlpark, Vereeniging and Meyerton.

Initially, the service was established for the Sasolburg area only, says Venter.

"We started with one ambulance and two staff members only. After the first three months, we identified the need for a second vehicle. During that time we worked on a standby system for an after-hours response."

Venter adds, "We currently run a full 24/7 service with very good contracts in the Vaal Triangle area, as well as Mahikeng in the North West Province."

He says that in addition to its 24/7 emergency response service, the organisation also provides medical services at special events.

"One of our new clients on the list in our special events focus is the Joburg2C mountain biking event that will be taking place for 25 April to 3 May 2014," mentions Venter.

This is the second consecutive year that Vaal Emergency Care has been contracted to provide the medical services for the annual sporting event.

Emergency fleet

Vaal Emergency Care currently operates three vehicles as part of its emergency fleet, consisting of two ambulances, a Toyota Quantum and ▶

▶ windows will require around 5 metres and the third floor around 8,7 metres. At a 70 degree pitch angle your bases are covered with the 10,5.

In your planning and subsequent training, it is advisable to make your 10,5m ladder the first ladder off the truck unless something else is specifically called for. It will make crews comfortable and confident to use it and encourage them to practice raising it in all types of locations. It doesn't carry easy due to the rung alignment when retracted and could provide some challenging when raised in a confined area.

As we all know, the two methods of raising an extension ladder are the beam raise and the flat raise. The beam raise, although tougher to do, is in my experience the better of the two as it works in confined areas and around power lines. It can be done with minimum manipulation. The flat raise is a lot easier if you have the space to set it up and lift it into place, but if you are in an alley, a walkway or have power lines, the flat raise is simply not possible.

Have your people practiced doing the beam raise, it's the one they will need when the pressure is on.

In closing

Ground ladders are possibly some of the most familiar pieces of equipment available to fire fighters the world over. They have changed very little over the years and will probably stay that way for a very long time to come. My message here is for fire services to relook at their ladder strategies. Are they in line with your fire attack strategy? Do they support your tactics? Are ladders among the first kit off the engine? Consider these questions. They might just have you rethinking your approach to how your service fights structural fires. ▲



Vehicle and crew visibility by general public is important to Vaal Emergency Care

▶ a Volkswagen Transporter, as well as one response vehicle.

A total of 10 full-time employees are based at the organisations premises in Sasolburg, with a further eight part time employees providing additional operational support.

The typical incidents that the service responds to in the region include motor vehicle accidents (MVAs), shootings, drownings, acute myocardial infarction (AMI) and interhospital transfers.

Venter says that the organisation has also responded to industrial related injuries, such as ‘crushing’ injuries, as well as gas inhalation and amputations.

“We have quite a variety of incidents, owing to the different activities taking place all over the Vaal Triangle.”

Best practice

Venter discusses the operational processes at Vaal Emergency Care, saying that the organisation proactively seeks to improve and maintain best practice.

“As a small service, we render medical services on a highly professional basis. We compete with the big national services and see it as an excellent learning module,” states Venter.

He says that emergency crews at the service are compelled to do a proper hand over when they report on duty.

“Equipment and vehicles will be checked and shortages or defects will be sorted out as soon as possible. During day time all crews are involved in different tasks. We will liaise with patients or clients in our operational area,” says Venter.

He adds, “Marketing is a vital duty for any business and it takes place in different ways on different days. Visibility of our vehicles and crews are also important, crews will move at pick times in certain areas where we know the general public will see us.”

Vaal Emergency Care values teamwork and creating open communications channels is important to the organisation. “We believe in teamwork and for this reason we keep our crews to interact with each other on a regular basis.”

Challenges

Asked to discuss the challenges

facing the organisation, Venter says that efficient service delivery is a top priority for Vaal Emergency Care and as such personnel are updated and tested on a regular basis in all disciplines. These disciplines include emergency care and organisational protocols, states Venter.

“Turn out times are very important, with the other private services you have to render a very efficient and professional service.

“You have to be updated with the latest skills, equipment and techniques at all times to make sure you do not stay behind,” states Venter.

Members of Vaal Emergency Care’s emergency personnel were among the winning finalists in the 2013 Centrum Guardian project for their assistance in a major bus accident in Meyerton in 2012. ▲



Vaal Emergency Care is contracted to provide emergency care to high profile events like the Joburg2C MTB



Richards Bay and Empangeni amalgamate into one city; uMhlathuze



The team of fire fighters at the uMhlathuze Fire and Rescue Services

UMhlathuze Municipality Fire and Rescue Service, with its headquarters in Richards Bay, where it has been located for the past 36 years since 1978, was established following the amalgamation of Empangeni and Richards Bay in KwaZulu-Natal, South Africa, in December 2000.

The newly established city of uMhlathuze comprises the towns of Empangeni and Richards Bay and has a total of four fire stations; two main stations and two satellite stations, serving the region that spans close to 800 square kilometres.



Chief fire officer, Oscar Ramaboea

uMhlathuze Municipality is the third largest local municipality in KwaZulu-Natal (KZN) and named after the uMhlathuze River that runs through the area, says fire chief of the uMhlathuze Municipality Fire and Rescue Service, Oscar Ramaboea.

Richards Bay is home to the South Africa's largest deep-water port and industrial development zone. Chief Ramaboea mentions that Richards Bay's coat of arms features a ship that represents the port, whilst the cogwheel symbolises industry.

"The modern deep-sea harbour was developed in Richards Bay following a decision made by Government in 1965. Thereafter, the town board of Richards Bay was established in 1969 and municipal status was bestowed upon Richards Bay on 1 August 1981," notes Chief Ramaboea.

Richards Bay is considered to be the industrial and tourism hub, while Empangeni is the commercial hub. Chief Ramaboea says that Richards Bay is seen as a growth point in South Africa. "Therefore the council lays emphasis on the supply of a professional service to the community," he says.

The city of uMhlathuze's fire service headquarters in Richards Bay

faces two major risks namely, the Island View Storage (IVS), which is an independent storage service provider for chemicals, gases, edible fats and oils and lube oil additives. The facility has over 700 000 cubic metres of storage capacity and is located on the Richards Bay coast, with other facilities in Durban and the OR Tambo International Airport.

The Afrox gas and welding plant is another significant risk in the region, mentions Chief Ramaboea. He says that these facilities do not necessarily impact on service or operations but can potentially impose challenges for uMhlathuze's fire service.

Organisation structure

The service is divided into four divisions. These are operations, safety and support services and training and disaster management and management and administration.

"Each division has functional sections, which are responsible for the accomplishment of specific functional goals and objectives," states Chief Ramaboea.

In addition to the chief fire officer role, Chief Ramaboea also acts as the chief of disaster management for uMhlathuze Municipality. ▶



One of four Ateco medium pumpers at the uMhlathuze fire service Rescue Services



An E-one cyclone fire engine that has been in operation in Richards Bay since 1992



uMhlathuze's fire and brigade control room



A boat used for swift water rescue functions in Richards Bay

► The municipality also has a manager: fire, rescue and disaster management services post, which is currently taken up by Andrew Vumba.

The fire fighter complement is broken into different levels of superiority with four leading fire fighters at the top of the structure, followed by senior fire fighters, fire fighters, junior fire fighters and trainee fire fighters. These make up a total personnel complement of 100 fire fighters and other administration and management personnel.

Chief Ramaboea says that the fire service recruits a diverse range of people as fire fighters. "Whatever your background gender, ethnicity, religion or sexual orientation, you'll be treated with equal respect. We do, however, have some basic but essential standards that all our recruits must meet."

These include physical and medical checks as well as an eye examination and the right to work in the country, says Chief Ramaboea.

Operations

uMhlathuze Municipality is equipped to perform a broad range of services in the fire industry. Chief Ramaboea says the municipality does not outsource any specialist service.

uMhlathuze's fire and rescue service capabilities include structural fire fighting, industrial fire fighting, fighting wildfires, high-angle rescues, hazmat incidents, swift water rescue and emergency medical services (EMS).

Chief Ramaboea says that the fire service has sufficient personnel to undertake all fire and rescue operations and these include four divers, two hazmat technicians and eight rope rescue personnel.

One shortfall of the service is the lack of a hydraulic platform for high-rise building fires and rescue functions.

Chief Ramaboea says that the most common incidents attended by the service are motor vehicle accidents, wildfires and swift water rescue.

However, the most noteworthy or biggest incident attended by the service was the shipwreck of the MV Smart bulk carrier on 19 August last year.

Chief Ramaboea says that the fire service has a working relationship with the local Disaster Advisory Council in uMhlathuze Municipality, which is located in the northeast region of KZN.

The fire service also has a working relationship with a Working on Fire (WoF) crew, which works with the fire department on fire protection and suppression duties on plantations in the region, says Chief Ramaboea.

Equipment

uMhlathuze Municipality has one major fire engine that has been in operation since 1992, which is an E-one cyclone pumper.

The other fire engines include a Freightliner airport crash tender in operation since 1999 and four Ateco medium fire engines in operation since 2005. ►



The Empangeni Fire Station



A GMC TopKick pumper used in Richards Bay since 1991

- ▶ The fire service also has one hazardous materials trailer, a water tender, one off-road pump unit, a Mercedes rescue vehicle and one rescue boat.

Asked to design the ultimate or custom fire engine for the fire service in uMhlathuze, Chief Ramaboea says that this would depend on the type of terrain and the type of risk that the fire engine would be required to service. The vehicle would have sufficient quantities of extinguishing agents, such as water foam or dry chemical powder, sufficient stowing compartments and a reliable chassis cab.

Training

The uMhlathuze Fire, Rescue and

Disaster Management Training Centre was proclaimed a training institution by Legislation in July 2009, states Chief Ramaboea.

He says that the uMhlathuze's training centre has since been involved in the development and presentation of national courses on behalf of the Southern African Emergency Institute (SAESI).

The uMhlathuze Fire, Rescue and Disaster Management Training Centre received accreditation for four levels of fire fighter training and this includes fire fighter one, fire fighter two, hazmat awareness and hazmat operational.

Training for fire fighting personnel at the service is ongoing and fire drills are scheduled to be held monthly at the station, while each fire fighter is tasked with participating in at least one fire drill every three months.

Fire safety

Chief Ramaboea says that the function of the safety department of the fire service is to perform a site visit to the station base and conduct an audit.

"With regards to our department, there are four shifts including the day staff personnel. Each shift and the day staff personnel are required to hold a 'safety toolbox talk' daily illustrating new and current safety measures and highlighting the importance of correct procedures and personal protective equipment."

Challenges

Chief Ramaboea says that insufficient training in terms of safety related issues and a lack of clearly defined safety procedures, count among the challenges faced by the fire service.

He adds that the lack of manpower and an inadequate fleet also impacts on the fire service's ability to deliver a professional fire and rescue service to the community. ▲



uMhlathuze Municipality chief fire officer, Oscar Ramaboea

Career planning, essential in rising to fire chief ranks

A career planning chart has played a significant role in current chief fire officer of uMhlathuze Municipality, Oscar Ramaboea's initial foray into the fire service fraternity and in reaching the heights of fire chief officer.

"While I was still at school I had career planning chart. I considered my career goals for the next two years," recalls Chief Ramaboea.

He says that he chose fire fighting as a career after considering his future, whereupon he devised both a short-term plan and a five-to-ten year strategy in his career ambitions.

He says, "This kind of thinking helps me breaking down my career strategy and planning into manageable pieces."

However, it was only after graduating from the Tshwane University of Technology that Chief Ramaboea developed an ambition to one day take up a chief fire officer role in the fire service industry.

Chief Ramaboea started out in the fire services industry as a reservist in the City of Johannesburg's emergency services for a period of two years and he was based at the Jabulani Fire Station in Soweto, south of Johannesburg. "Here I had the opportunity to train in basic ambulance assistance (BAA)."

After more than 18 years of service in the industry, Chief Ramaboea now heads the City of uMhlathuze's fire service, which is an amalgamation of the cities of Richards Bay and Empangeni in KZN.

He says that the passion for his job has been a constant through the years, adding that exposure to bigger responsibilities, achievements and the realisation of his goals has been the motivators throughout his career.

Chief Ramaboea is focused on establishing a viable and effective fire service in the uMhlathuze Municipality. He seeks to establish and deliver fire brigade services to previously disadvantaged communities and align operational standards in the rural and urban areas.

Mentors

Being a first generation fire fighter, Chief Ramaboea drew inspiration and knowledge from his superiors in the fire industry.

He says that his mentors included his former divisional officer, Johan van der Merwe and a lecturer at the Tshwane University of Technology, Professor Samson, who was lecturer of hydraulics, physical science and chemistry.

"They gave me the skills to succeed in the field of fire fighting, student affairs and strengthened my love and commitment to my profession," states Chief Ramaboea.

The fire chief has adopted a democratic and participative approach to managing the fire service and he says that he is consultative as well.

Chief Ramaboea's advice to fire chiefs in training across the fire service landscape would be to acquire 'quality fire training', which he says is one of the major key components of success as a fire fighter.

As for his thoughts on fellow CFO's, Chief Ramaboea says that information sharing among fire chiefs is key as it acts as a 'virtual mutual aid', from one chief to another.

The areas of finance, management, personnel and operations are some of the areas where fire chiefs, such as Chief Ramaboea, through professional experience are able to impart to burgeoning fire officers.

"As fire chief, our professional experience in problem solving, as well as developing workable solutions for our department may prove to be a great benefit to other chiefs in similar situations," explains Chief Ramaboea. ▲



Extreme winter fire season conditions expected following late rainfall

Prescribed burning is conducted by FPAs across the country

Preparations are underway in the South African fire industry for the approaching winter fire season, which runs from June to October and fire managers are readying themselves for the worst possible cases.

Fire risk in many parts of the country is exacerbated by the heavy rainfall in mid-March this year, which has resulted in high fuel loads and a delay in fire mitigation processes, including firebreak construction activities by fire protection associations (FPAs) and forestry companies.

Fire risk officer for Komatiland Forests, Annalize van Wyk, says that preparation times for constructing firebreaks will be a 'huge challenge for plantations' owing to the high volume rainfall in Mpumalanga Province.

In the North West Province, umbrella fire protection association (UFGA) manager, Dr Kobus Roux, says that the region is gearing itself for a very 'harsh winter season', with historically dry regions experiencing a significant increase in fuel loads.

Department of Agriculture, Forestry and Fisheries (DAFF) fire advisor,

Malcom Proctor, puts the forthcoming winter fire season into perspective, saying, "As fire managers we always predict that this year will be far worse than any previous year."

Fire and Rescue International speaks to fire managers from the UFPAs, as well as fire specialists from forestry companies across the country, to gain insight into preparations for the winter fire season ahead.

Mpumalanga

After experiencing a drop in the average rainfall in 2013, recent rainfall in Mpumalanga Province has brought the deficit back into line for a 'normal year', states Mpumalanga UFGA (MUFPA) manager, Trevor Wilson.

He says that the fire risk in the province has improved with the heightened awareness of FPAs and its benefits to landowners.

In addition, the maturity of certain FPAs is progressing, states Wilson. He says two FPAs have made strides with the purchase of their own fire tankers to provide a better service.

The staffing of the tankers is handled by the Working on Fire (Wof) teams,

giving much 'better scope for assistance', says Wilson.

"We have learnt the hard way that a team without transport is almost useless on 'that day'. Landowners picking up the teams to help with preparedness are only as effective as the transport available and when it comes to fire suppression they need their own transport because everyone is busy with the fire," explains Wilson.

Alliances: MUFPA has developed a good alliance with the provincial disaster management centre (PDMC). Wilson says a proposed model for the funding of aircraft by the Mpumalanga provincial disaster management centre (PDMC) is being drafted and is currently in the final agreement stage.

The aircraft proposed for funding, include a chopper with a heli-attack crew and a spotter for 12 months a year. "This is a very exciting possibility and will be a powerful augmentation to the province if it finally comes through," says Wilson.

Equipment: While equipment is very sparse among FPAs, landowners in ►



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Komatiland Forests is currently conducting understorey burning at its plantations

Mpumalanga FPAs has acquired three new Air Tractor 802s for aerial fire fighting

► Mpumalanga are well-resourced, says Wilson.

Three Air Tractor 802s have been funded by FPAs for use in the 2014 winter fire season.

Wilson says these specialised aircraft are the future in aerial fire fighting. "We are looking forward to using them extensively in the initial and extended attack role. Including the national WoF choppers, the province will have more bombing units this season than in 2013."

In conclusion, Wilson says that he hopes that extreme fire weather does not pass through the province winter.

Kruger National Park

Nick Zambatis, fire protection officer of the Greater Kruger Fire Protection Association (GKFPA) in Mpumalanga Province, forecasts an abundance of fires in the Kruger National Park (KNP) region in 2014.

Zambatis says that there is a greater risk of runaway fires, when compared to last season and this is because of the higher fuel load. The GKFPA area of coverage for fire totals 2 200 000 million hectares.

GKFPA membership has shown growth over the past year. According to Zambatis, about 1 200 landowners and stakeholders were formally represented in the GKFPA in July 2013.

Operations: Zambatis says that there are few operational changes in 2014, when compared to 2013. He adds that there is a limitation of manpower and resources in the region.

Operational management plans are to be implemented by the FPA with some additional firebreaks to be prepared in the GKFPA operational region.

Training: The GKFPA has requested fire managers in the private reserves to undergo training in order to become compliant with legal requirements and the rules and requirements for membership to the GKFPA, states Zambatis.

The FPA has a total of 450 trained fire fighters in the region and a range of basic fire fighting equipment that includes bakkie-sakkie units, knapsack, drip torches and personal protective equipment (PPE).

Runaway fires are the prevailing risk and an expected challenge for the FPA this winter. "We expect more runaway fires than normal, including runaway fires entering KNP from other territories, especially from Mozambique," says Zambatis.

Komatiland Forests

Weather plays a big role before and during the fire season, says Annalize van Wyk, fire risk officer at Komatiland Forests (KLF), which owns and manages softwood saw log forestry assets in the Mpumalanga, Limpopo and KwaZulu-Natal (KZN) provinces of South Africa.

"It all depends on the weather forecast. We have experienced extreme weather conditions over the past couple of years and every year the weather changes. Some plantations had their annual rainfall in a two-week period this year, which is surely extreme weather conditions," states Van Wyk.

Operations: Van Wyk says that KLF is in the process of integrating a fire hazard rating (FHR) and a buffer zone system, which is designed to reduce high-fire risk on the plantations.

KLF is a pioneer in understorey burning manually and with aerial ignition, states Van Wyk. She says that under canopy fuel load reduction is one of the long-term projects that KLF is currently undertaking. "Understorey burning involves a scientific burning operation with approximately 25 burning days in a year - weather permitting."

Prescribed burning: KLF has a total prescribed burn area of 10 000 hectares leading up to the winter fire season this year, an increase from the 8 000 hectares burned in 2013.

A total of 831,5 kilometres of firebreaks were constructed by KLF at its forestry assets this season, the same as in 2013.

Equipment: Van Wyk says that KLF also runs its own incident command centre (ICC), which has a mobile staging unit and a fire store with adequate hand tools for fire fighting. Personnel with training in the IC system are also part of the ICC.

"In case of devastating fires, KLF can always count on neighbours in and around the plantations. The neighbours and communities stand together as one team to combat fires," says Van Wyk.

She mentions that basic fire fighting training is done each year in preparation for the winter fire season that gets underway in June. ►



The North West will welcome five additional WoF teams in the province in 2014

The Kruger National Park has high fuel loads following heavy rainfall in mid-March this year

►Challenges: "All KLF plantations will have to plan the preparations for firebreaks very carefully and will have to prioritise the preparation of the high fire risk areas first," explains Van Wyk.

She says that the fire risk for this fire season can be described as relatively high, potentially creating challenges for fire management operations this season. "The extreme weather conditions and tall grass in all the areas is becoming a high fire risk," she says.

North West Province

Drought conditions were experienced in the North West Province in the past two years in 2013 and 2012, says North West UFPA (NWUFPA) manager, Dr Kobus Roux.

As a result, landowners and farmers will be reluctant to prepare firebreaks because of the 'below normal fire season of 2013', says Dr Roux.

He adds, "We expect a very harsh winter season owing to favourable growth conditions for the veld and grassland in the region."

Risk profile: "Due to the good rains, I think we are going to expand our horizon because places in historically dry regions also had quite a significant increase in fuel load," states Dr Roux.

He says each of the 20 registered FPAs conducts their own preparation in accordance to their own rules and regulation and the NWUFPA assists the FPAs where it is necessary.

The prescribed burning area differs with each FPA, says Dr Roux. "Usually it is along main roads and along the provincial borders, but differs

when taking in consideration the topography of the terrain."

Cooperatives: Dr Roux says that the UFPA and the FPAs in the province work closely with the FFA Group and its integrated fire management project, WoF.

In addition to the WoF fire fighting crews already active in the province, an additional five WoF crews have been 'earmarked to be posted at various locations in the province to assist the local FPAs'.

The local FPAs also receive support from the provincial disaster management structures, which contribute significantly to the operations of the FPAs in the different districts and this includes the provision of fire fighting equipment.

Each FPA is responsible for its own equipment. "The tendency is that each person must provide his own equipment at own cost," says Dr Roux.

Sappi Forests

Silviculture development manager for integrated forest products company, Sappi Forests, Duncan Ballantyne, says that the organisation is geared for the worst case conditions this season.

He says readiness levels are evaluated and adjusted during the season to weekly and daily forecasts. "Rather over resourced than under resourced," says Ballantyne.

Risk profile: Sappi Forests owns and manages more than 260 000 hectares in the Mpumalanga escarpment and Highveld.

Severe weather, social and political instability, as well as poor cooperation and communication with neighbours and stakeholders are among the major risks that the organisation faces. The deterioration of plantation roads, due to severe rainfall and flooding in the region in mid-March also counts among the company's risks.

Operations: Sappi is maximising the effectiveness of available aerial resources as part of a rapid response and initial attack portion of its integrated management practices.

To this end, the organisation has contracted at least two Air Tractor 802s into Mpumalanga as part of FPA-based resources, reports Ballantyne.

He says that the importance of a fully operational early detection system remains a cornerstone in minimising losses effectively.

In addition, the organisation continues to support coordinated fire awareness and advocacy programs in integrated fire management practice.

Equipment: Sappi deploys 900 trained and equipped fire fighters and has more than 90 vehicles designed and equipped for fire fighting in Mpumalanga alone.

New equipment and resources acquired by Sappi for fire fighting operations in 2014 include an Air Tractor 802, a new fire detection camera system and aviation runways have either been upgraded or newly built.

All fire fighters at Sappi undergo refresher training before ►



Fire fighting aircraft is increasingly being used as a rapid response and initial attack resource



The Greater Kruger FPA covers two million hectares in the Kruger National Park area

► commencement of firebreak preparation annually, says Ballantyne. Management teams are exposed to incident command system (ICS) training and fire simulation exercises are conducted before the start of the fire season.

Annual fire competitions are held with Sappi fire personnel where all equipment and staff is evaluated on readiness, to ensure that minimum standards are achieved. "Non-conformances are identified at the fire competitions and corrective action is put into place," states Ballantyne

Alliances: Sappi actively participates in all statutory fire fighting forums and maintains a strong leadership role within FPA and UFPA level.

"Interaction on provincial and national disaster management forums is seen as critical to ensure effective alignment of resources, good communication and cooperation and to ensure that effective integrated fire risk management practices are implemented and maintained," explains Ballantyne.

A delay in completing firebreaks, owing to late rainfall, is currently one of the principal challenges facing the organisation this season.

KwaZulu-Natal

Extremely dry conditions in parts of the KwaZulu-Natal (KZN) Province, leading up to the start of the fire season, indicates that this will be a 'very busy' fire season, says fire protection officer for the KZNFFPA, Simon Thomas.

The UFPA has decentralised its aircraft in order to ensure a more rapid

response to fires, explains Thomas. He says a new 'forward base' has been established in the southern part of the KZN Midlands, in addition to the base already being operational in the central region.

Equipment: The UFPA manages 14 fixed wing bombers and seven spotter aircraft in the province, with two additional national WoF helicopters assigned to the region. The aircraft is placed with FPAs in fire prone regions across the province, such as in Vryheid, Melmoth, Kwambonambi, Shafton and Richmond.

Alliances: Thomas says that rail, port and pipeline company, Transnet, has come on board as a member of the different FPAs in the province over the past year. The UFPA is also currently in talks with power utility, Eskom, which it seeks to join the FPA structures in the province.

An early warning systems funding model created by the local uMgungundlovu District Municipality is one of the new developments in the KZN. "This entails putting up extra fire detection cameras to supplement existing network for rural areas of the province," says Thomas.

He mentions that the UFPA has had a growth in the number of FPAs aligned to the umbrella. There are currently 24 FPAs aligned to the KZNFFPA. "We are getting more FPAs in the rural areas. WoF has people in these areas and we are looking at Firewise programmes for communities in these areas."

Training: The KZNFFPA conducts fire fighting courses for personnel on the fire line annually and ICT training is

provided for fire managers in April, before the start of the winter fire season, states Thomas.

He says training is provided to fire fighters, landowners and FPA managers.

Challenges: The rising costs of fire fighting and in particular aviation that is mainly due to rand dollar and fuel increase, is the foremost challenge for FPAs, states Thomas.

He says that KZNFFPA is looking to establish a centralised 'negotiation base' in the province in order to facilitate standard rate for equipment and aerial resources and services in the province.

Standard operating procedures (SOPs) are also being set up by the KZNFFPA for implementation throughout the province, states Thomas.

Free State

Free State UFPA technical advisor, Malcom Proctor, says that global warming is having an influence on regional risk profiles, adding that certain regions and local municipalities in the Free State have recorded a higher prevalence of wildfires in recent years.

Risk profile: Higher population densities lead to higher incidences of fire, says Proctor. "Inadequate resources and the vulnerable socio-economic conditions affecting fire prone communities have an adverse effect on a community's ability to manage uncontrolled wildfires and often lead to a spiral of repeat disasters affecting the same communities," he explains. ►



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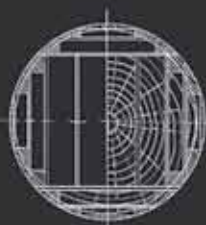
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and districts that best comply with the NFVF and DAFF's provincial department in the Free State is considering a further two trophies for most improved FPA and municipality.

Membership: Since the Free State UFPA was not officially registered until 2013, State institutions refused to join the UFPA as member. This has now changed and the UFPA is looking forward to increasing its membership.

Firebreaks: Proctor says that agricultural funding for mechanically constructed firebreaks has increased to 2 100 kilometres in the Free State, after 1 100 kilometres of firebreaks were made in 2013.

After being able to construct 50 kilometres of open-ended firebreaks in 2013, the province has not received funding for open ended firebreaks in 2014, states Proctor.

He says there are currently 20 WoF teams placed at various sites in the province that assist with firebreak and suppression operations. A further six WoF crews will be placed in the Free State this winter fire season.

Challenges: The number of fires originating from municipal dump sites is one significant challenge facing FPAs in the Free State. "In some years up to 30 percent of the 238 000 hectares annual area burnt in the province originated from uncontrolled burning at municipal dump sites," reports Proctor.

Proctor says fires that have spread from these sites have in the past resulted in court cases against local municipalities. "The resultant damage claims being made against local municipalities that can ill afford it, thus impacting on service delivery."

The lack of support from State institutions is one of the overarching challenges facing the Free State UFPA.

Limpopo

Letaba FPA chairman, Trevor Phillips, says that fuel loads have increased in the Letaba Municipality and greater Tzaneen in Limpopo Province leading up to the fire season this year.

After experiencing 'few fires' in 2013, Phillips says the predicted early frost and wind conditions and high fuel ►

► Proctor says that uncontrolled, untimely or indiscriminate wildfires in the Free State Province pose a threat to healthy grasslands and good grazing. "Large areas of the protected areas have been burnt as a result of runaway wildfires sweeping into parks from sources in adjacent land, while large tracts of valuable grazing have been destroyed on neighbouring farms."

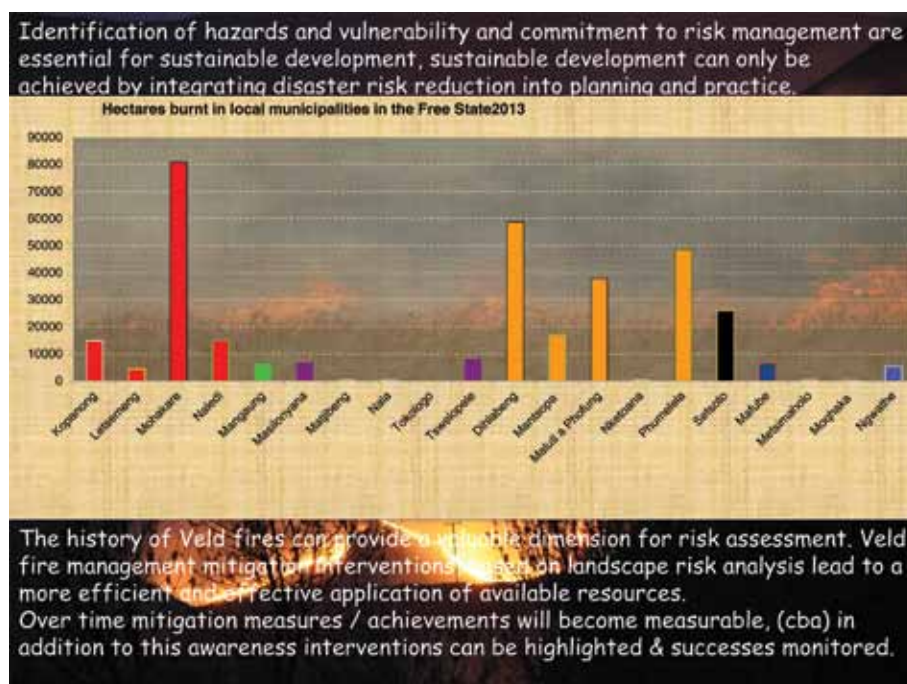
Alliances: In order to encourage the involvement of district, local municipalities and towns in wildfire mitigation, the Free State UFPA has elected to award National Forest

and Veld Fire (NFVF) Act compliance trophies.

District and local municipalities and towns that make the greatest effort towards compliance with the NFVF Act will be awarded with trophies.

Proctor says that the University of the Free State (UOFS) disaster management faculty has agreed to assist the Free State UFPA with the evaluation process and compliance with the NFVF Act.

In addition, WoF has sponsored three trophies for the towns, municipalities



Hectares burned in Free State in 2013

New poster series launched



18 watch out situations poster



Fire crew readiness poster



Mopping-up poster

Do we train to comply or to improve? Ben Potgieter of PreFire Risk Management raised this question at a recent forest fire management symposium. Further involvement in training and infield simulation sessions during 2013 has confirmed that the majority of contractors or landowners train to comply.

Trained fire crews were found not yet competent in various aspects of fire suppression training.

- The majority of fire fighters don't remember or understand the 18 watch out situations
- Too many controlled burns or contained fires become out of control because of poor mopping up operations
- Fire crews are not always on the highest level of readiness

This situation challenged Potgieter to make a difference. He designed three sets of posters that are available in

A1 format and laminated. Potgieter designed these posters to educate fire crews on how to prepare for high fire danger periods. The posters explain what is the correct mopping up procedures and are all illustrated with 18 pictures per topic supported with text and call outs.

As it is difficult for people to remember the 18 watch out situations, the posters were illustrated with pictures to help fire fighters remember the important fire safety rules.

The poster sets are also available in an A3 laminated toolbox talk format for ease of use by trainers. The series is available in English, Afrikaans and Zulu while other languages can be catered for on request.

Contact Ben Potgieter to place orders at email prefire@forestrysolutions.net▲

► content will make for a more difficult winter fire season this year.

The region has a large fuel load carryover from last season, with good rains and hot weather experienced in between and during the summer months.

Phillips says that the Letaba FPA will employ the use of more WoF teams in preparation for the fire season ahead, with more fire awareness and forestry area firebreaks being conducted by FPAs.

Operations: The FPA has contracted a new part-time fire manager

for seven months this year and a base manager, public relations officer and a Type 1 dispatcher have been added to the Letaba FPA personnel.

Two troop carriers have been added to the FPAs resources courtesy of a Letaba District Municipality for fire personnel in the province. Additional resources acquired by the Letaba FPA this season, include one helicopter and a spotter.

Membership: Phillips says that the Letaba FPA membership is stable. He says that 75 percent of the fire fighting resources and budget is

received from 10 landowners, while 25 percent of landowners do not have a helicopter option.

"We could have more State membership, but they are slowly coming on board and these include the Land Bank, the Limpopo Department of Economic Development, Environment and Tourism and DAFF."

Phillips is weary of 'disaster fires' in the Letaba Municipality this season and says the lack of aerial resources and budget allocation from the provincial government in Limpopo are challenges facing FPAs this season.▲

Promoting and implementing community risk reduction for the next generation fire service

By Rodney Eksteen, Assistant Director: Fire Brigade Services, Disaster Management and Fire Brigade Services, Western Cape Government



Community education initiatives are long-term investments in the community

In South Africa, public fire safety education has progressed significantly over the past decade. The concept of proactively educating a high risk population on how to prevent harmful fire and how to survive it has been expanded to include an 'all hazard' approach. In certain departments, public fire and life safety education has emerged as a profession with permanent staff allocated to a dedicated public education division.

Fire safety engineering, enforcement and educational interventions that mitigate fire loss work very well when applied simultaneously as part of an overall fire prevention strategy. This 'synergistic' effect enhances fire prevention and is an important reason why community education must be priority within any fire service mission.

The presentation of the fire and life safety educator training by fire chief, Edward Kirtley, in September 2000, was a milestone for the fire service in South Africa. The guidance and direction received over the ensuing years inspired many leaders to implement and further develop fire and life safety education as an integral component of an overall fire prevention strategy.

Unfortunately, the South African National Standards (SANS) 10090, community protection against fire, does not include any guidance

on community education other than referencing the National Fire Protection Association (NFPA) standards. For example, NFPA 1201, the standard for public fire protection services, requires each fire department to provide fire safety education as part of the department's community services and to appoint a coordinator for community education. Other standards, such as the NFPA 1001, the professional qualifications standard for fire fighters, requires fire fighters to be able to deliver a community education presentation from prepared lesson plans. Similarly, NFPA 1021, the professional qualifications standard for fire officers, requires fire officers to be able to conduct community education programmes.

In this article we will take a look at some of the important organisational elements to consider when implementing a community risk reduction operation.

What is community risk reduction education?

Community education, also known as public education or fire and life safety education, is part of an overall process called community risk reduction (CRR). Community risk reduction utilises prevention processes to reduce or eliminate hazards and risks in the community, thus reducing the frequency and severity of fires and injuries.

The first step in the CRR process is methodical planning (see diagram 1). However, the foundation for long term success is laid long before the planning step is begun. To ensure long term success the most appropriate individuals must be made responsible for the process. In addition to this, there must be strong personal and organisational commitment to making the programme achieve its goals and objectives. The overall organisational attitude about the community education programme is the area where the seeds of success are sown.

Can I make a difference?

Over the years many advocates or champions for CRR education in the fire service have made valuable contributions. This can be clearly seen by the many changes and developments that have taken place in fire departments throughout the country. Many of these activists have since left the service or moved on to other opportunities. There are many more coming up the ranks and others that see the impact that CRR education can have, not only for the community, but the fire service itself. These individuals are the heart and the soul of the programme. It will be up to them to motivate others, to support the programme and to be involved. While having a sound, rational argument for the CRR programme helps; their beliefs, attitudes and commitment for community education will be what convince others to get involved or to support these initiatives.

So, what does this mean to you? First, you must understand what is involved in your personal commitment to CRR education, including the planning process. You must take the time to set your heart and mind in the right direction before you ask others to get involved. Second, you must serve as a catalyst and activist to gain the commitment of the department leaders, and with that, the commitment of the organisation. You will have to have their commitment if you are to be successful.

How do I make a difference?

There are several actions that you can take to build and maintain a successful CRR education programme. Firstly, you must make a personal commitment to perform these actions day-in and day-out, ▶

▶ regardless of the challenges you face. Secondly, you must take the time necessary to convince department leaders, especially the fire chief, of the importance of long-term commitment to community education.

Your fire chief may not have any experience with community education, especially if it is a new programme within your department. The better the chief understands what community education is and what is required to have a successful education programme, the better he/she can support you and your programme. It is your responsibility to educate the chief and other decision makers and leaders, about community education.

The department leadership must understand that 1) community education can effectively reduce fires and injuries when used as part of the department's overall prevention strategy, 2) it takes months and years for community education initiatives to be effective, thus requiring a long-term investment on the part of the department; 3) and any community education effort must be completed in partnership with other community organisations.

There are several actions the individual must take in order for obtain support for the community education programme. Those actions are summarised below.

Be the community education activist. In any great change effort there are always leaders who step forward and lead the charge. That person can be you. The CRR education champion must be a cheerleader,

an organiser, a promoter, a recruiter and a coordinator all in one. They must get others excited about the possibilities of reducing fires and injuries through community education and then channel that excitement into action and participation. Your enthusiasm must be infectious so that others will want to get involved. Most importantly, you must keep community education on the minds of your department leaders so that the department stays committed to the programme. One of the toughest tasks you may face is winning the support of other department members. Take the time to inform them of the need for community education and the potential for success. Answer their questions about their potential role in the community education programme. Listen to their recommendations and recruit their assistance and support with marketing your programme to the community.

Be willing to involve the community. The simple fact is that no fire or injury problem can be solved by one organisation or by one person. Preventable fires and injuries are community problems. Their causes are multi-dimensional and are generally related to social and economic issues. Because of this the solutions must also be multidimensional. This will require that you work inside the community to address the problems. You must continually seek partners that can help with the solutions. These partners can be nongovernment organisations, neighbourhood and religious groups, etc. These partners can help you reach the target audiences; research the problem; deliver the interventions; etc. In addition, you must always remember

that you are a partner to them. You must open yourself to providing them assistance. You must keep your commitments and contribute to the success of the team. It is up to you to ensure the relationship with the community team is not one-sided. Remember, community education initiatives are long-term investments in the community. You will have to have the community's assistance if you are going to be successful with the community education programme.

Obtain organisational commitment. The support and assistance of the department and its members is absolutely essential. There may be a few short-term victories without the organisations commitment, but long-term, the desired community-change will not happen without this level of commitment. Organisational support will help to utilise available department resources for community education programmes. This doesn't mean that every resource needed will be available through the department, rather, the resources the department does have can be used for community education activities and programmes. This includes the most valuable department resource: its people.

When the organisation is publicly supporting community education initiatives it sends a message to other organisations and agencies that reducing fires and injuries in our community is important! This adds credibility to any existing CRR efforts and highlights this undertaking as a priority. Other organisations are going to be watching the department to see if it places a high priority on community education. If the ▶



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► department is supporting community education, those other potential partners are going to be much more likely to get on board and support the programme.

In addition, fire department leaders can help make connections with other leaders by facilitating introductions to other influential people so that you can promote the community education initiative directly to these decision makers. This support can open doors that otherwise might not be possible, or would require a great deal of time to accomplish.

Follow evidence-based planning processes

Take the time to understand the steps that must be completed in order to get an operational programme established. This includes completing a planning process, gaining support of the department leaders and developing a partnership with the community. It is easy to begin to believe that we know all the answers to fire and injury problems. We need to remain objective in our decision making and in the use of public education methods.

Before guessing about the community's problems and risks, conduct a community risk assessment to get accurate data. To determine possible solutions, meet with the target audience and other stakeholders in the target community. Get as much information as you can and then consider what the information means. When you need it, get help in the analysis; academic institutions can be a valuable resource in this regard. One word of caution, you can get lost in trying to make sure that you have all the facts. Don't allow yourself to suffer from 'paralysis through analyses'. At some point you must step forward, make some decisions and move ahead with the process.

What actions can decision makers take to support community education?

Organisational commitment for community education must be long term to the point where it becomes an internalised part of the organisational culture; something that is simply part of the way we do our day-to-day business. The leadership of the organisation must make a personal commitment to help create and maintain organisational commitment for community education. This commitment must result in the institutionalisation of community education. This level of commitment requires strong leadership and is not a 'one time thing'; it is an all-the-time thing.

There are several actions the organisation must take in order for its community education programme to be effective and achieve its goals. Those actions are summarised below.

Develop and include the community risk reduction goals in a long term strategy. Successful community risk reduction initiatives take time. Organising a successful prevention initiative will require various elements, such as obtaining resources and support, building community partnerships, developing a relationship with the target audience, implementing interventions, monitoring and evaluation. Some community education initiatives will require a multiyear commitment from the department. For example, school-based education programmes such as the Learn Not to Burn® Preschool Programme South Africa, must be in the classroom over a period of years to be successful. Successful risk reduction interventions don't happen overnight or in a few days; it takes time and requires an investment on many levels. The department must make a long-term commitment at the beginning of these programmes.

Institutionalise community education as an organisational value. In the fire service, fire suppression is a programme that is deeply ingrained as a department value. No fire fighter would ever argue that fire suppression is a key mission of the department. The same should be said about community education. The fire chief and other leaders must work to make community education an accepted and integral part of the department's culture. Fire and life safety education should be included in the mission statement; it should be a separate programme in the department's budget; job descriptions should include community education as a required duty; personnel should be trained as community educators; and community education should always be part of the department's overall fire prevention strategy. In this way, prevention programmes also become sustainable and don't come to an end when an individual leaves the service.

Prevention strategies, including community education, are given an equal priority to fire suppression. This is probably the hardest step to take in most fire departments. Suppression is and always will be a key mission of the fire department. However, the greatest mission of the department is to prevent the fires and injuries before they happen. This is not a 'pie-in-the-sky' mission; it is something that can be accomplished through a comprehensive prevention programme that includes community education, code enforcement, plans review, etc. For the prevention programme to reach its full potential in saving lives and preventing fires it must be given the same priority as fire suppression. This includes equal consideration when developing the department budget, assigning staffing, and developing community initiatives. As with making community education an organisational value, this task must begin with the fire chief.

Commit the department resources to the community education programme. Community education, just like any other department programme, requires resources. Those resources include funding and people. This commitment must come from the top down and the commitment must be for the long term. Internationally, the fire departments with the most successful community

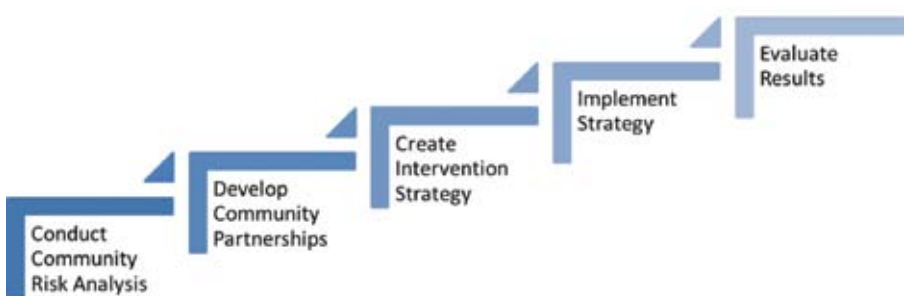


Diagram 1: Community risk reduction - 5 Step planning process

► education programmes all share one common strategy: every person in the department is a community educator. This includes fire fighters, fire safety personnel, volunteers, and even general staff. Everyone must have a responsibility and be involved in some way, in the overall CRR programme.

Using fire fighters in community risk reduction requires recognition and support from the very top of the department, but even that will only last as long as the head of that respective department is in place. A new chief, with new opinions, can undo years of effort and kill a successful programme quickly. Fire fighters must believe that community risk reduction isn't just 'window dressing' or a way to make the chief look good.

Training programmes on community risk reduction must be mandatory. CRR is not something that is normally in the education and training curriculum for fire fighters. Yet, that process is a key to reducing fires and injuries. Fire fighters and fire officers should receive training on how to develop a community based risk reduction strategy, which includes conducting a community risk analysis, identifying the appropriate strategies to reduce the problems and methods for involving the community in the prevention programme. To truly instil the value of these concepts long term, training is critical, as fire fighters can justifiably protest about doing anything without the necessary skills or tools to do it well. Long-term appointment and promotion practices that reward community risk reduction skills can go a long way toward institutionalising them.

Fire officers and department leaders find it difficult to support what they don't understand. By attending training opportunities such as the fire and life safety educator, public information officer and other community risk reduction courses, managers will learn valuable lessons and skills that will be an asset to the community education programme.

The department takes a leadership role in the community in terms of fire and life safety education. In most communities the fire department is the most visible organisation with a prevention mission. The department must step forward and



We need to dispel the myth that embracing prevention strategies will eliminate jobs

take a leadership role by building partnerships, which address fire and life safety issues. This does not mean the fire department must be the major player, nor does it mean that the fire department must assume the primary responsibility for prevention. It means that the department must be a willing and supportive partner in the community engagement process that identifies the major fire and injury problems, and then develops solutions to these problems. Then, when necessary, the department must step forward, take a leadership role and guide the process.

Summary

In summary, there is more to a successful community education programme than simply a good presentation and attractive handouts. Success is found in doing the right things right. This includes building internal support for community education, understanding the role the community educator plays in successful programmes and creating an organisation that is focused on prevention and community education. In bad times and good and through changing managements, if we are to maintain a high level of public safety and the respective community support for our services we must institutionalise community education.

We need to dispel the myth that embracing prevention strategies will eliminate jobs; in our lifetime, they won't. In fact, amid budget cuts to fire departments everywhere, budget support has emerged where the fire service is embracing prevention and risk reduction.

In today's tough economic climate, community risk-reduction efforts provide a cost effective opportunity for the fire service to demonstrate a caring and professional attitude towards its public. Many fire departments across the country are experimenting with the concept of actively reaching out to high-risk communities, visiting homes and engaging with the population regarding their many risks. Fire service personnel cannot know everything there is to know about community risk reduction; much like hazmat or emergency medical services (EMS), specialised expertise is required within the service for more complex prevention problems.

Accomplishment is often deceptive because we do not see the pain and perseverance that produces it. These accomplishments would not have been possible without the valued contributions of many dedicated individuals that have left their mark on this very crucial fire service responsibility. There are people alive today because of these fire prevention interventions.

I strongly believe that evidence-based fire prevention strategies are an integral part of the next generation fire service. Community risk reduction tactics hold the capacity to protect the core role of the fire service whilst ensuring that the service remains relevant in the new economy.

In the end, our job is about saving lives; whether we get credit for it or not. That is the true heroism of the fire service. ▲

It is important to undertake an investigation as soon as possible, albeit a preliminary one, sometimes even while the fire is still burning before important clues are destroyed

How to go about arranging a wildfire investigation in your area

By Rob Erasmus, Enviro Wildfire Services

Despite the importance of reducing malicious wildfires in South Africa, a lack of time, funds, manpower and resources are the primary reasons why wildfire investigations are not undertaken more often. It would appear that guidance is perhaps the missing ingredient.

In our last article we suggested procedures to be taken to protect the origin when suspected wildfires are being lit in your area, as well as who to contact to undertake an investigation. In this article we take it a step further and include the 'multi-agency task team' concept, which is simply a grand term to describe different organisations working together to solve a series of malicious fires in an area.

So, you have reason to believe that someone or some group is maliciously setting fires in your area for whatever reason. The fact is that it is costing you time and money to put them out and might even have the potential to do serious harm or damage to life and property. In most cases the authorities sit back and claim to not have the resources, time or funds to investigate the situation and each organisation passes the buck claiming it is the responsibility of another agency. The outcome? Nothing gets done and the perpetrator(s) continue with their game.

Here are some suggestions on how to go about having an investigation undertaken if you have good reason to believe that malicious fires are being set in your area:

1. Meet with your supervisors and provide them with facts and figures of the fires (dates, times, areas, circumstances, costs for suppression, etc). Explain the expected outcomes over the next six months if nothing is done.
2. Explore wildfire investigation options, including your local South African Police Service (SAPS) detective unit, district municipality fire department and the private sector.
3. Once a qualified wildfire investigator who is willing to assist has been located, meet with them to discuss possible agreements, rates, assistance and steps to be taken when a fire occurs.
4. When this has been achieved, arrange a meeting with senior representatives from the local fire department, SAPS detective branch, conservation organisation, fire protection association (FPA), Working on Fire (WoF) and any other organisation (farm watch groups, etc) to explain the concerns and plans.
5. Awareness and training programmes for first responders can then be arranged to teach such personnel how to identify and protect the general origin upon their arrival at the fire scene. Bear in mind that protecting the origin is a crucial part of the investigation.
6. Develop a wildfire database (this is very different from the usual fire records database) that will enable trends to be detected.
7. Where possible, arrange to have EVERY suspicious fire preliminary investigated as soon as possible.
8. Once suitable data is collected, a meeting is once again held with the various representatives. At this meeting a multi-agency task team is formed, consisting of representatives from agencies who are able to make a meaningful contribution to apprehending the suspect(s). The information collected at wildfires from here on should be regarded as confidential and should only be made known to the members of the task team.
9. Most communications from here on are done via email and telephone, with meetings held as and when necessary, such as to discuss new information or revised plans.

While this might sound very much FBI/CIA orientated, it is nothing more than a coordinated approach involving all

agencies to apprehend malicious fire setters, ensuring that no one is left out of the loop and that petty politics are avoided.

While we have done our utmost to avoid using this series of articles as a marketing ploy, we are aware that the reason why the majority of fires are not investigated is because most agencies do not have the resources, time, manpower or funds to do so. We hope that most readers will agree with this.

In response to this, Enviro Wildfire Services, a registered nonprofit organisation based in the Western Cape, South Africa, is offering to undertake preliminary wildfire investigations at no charge, with certain terms and conditions such as use of the information and travelling costs. The reasoning is that with this offer more landowners and agencies will request and have preliminary investigations undertaken, which will serve numerous purposes, including the collecting of crucial information at an early stage (before it is damaged, destroyed or removed), and the determining of the actual cause of such fires.

The primary function of undertaking a preliminary investigation is not only to determine the origin and cause, but also to document the general and specific origin, photograph and collect evidence and collect other important information such as weather and details of eye witnesses as soon as possible.

The findings will indicate whether the fire was indeed malicious or as a result of a negligent/accidental incident. Based on this, an educated recommendation can be made as to whether a formal investigation should be undertaken. The benefit of this process is that all the crucial data would have already been collected during the preliminary investigation, which will reduce the overall cost of the formal investigation by about 30 %.

Much of South Africa has been playing catch-up regarding wildfire management and I would like to believe that good success is being achieved in many areas as a result of ongoing awareness campaigns, alien clearing projects, fuel reduction programmes, land owner compliance through FPAs, establishment of Working on Fire bases, and firebreak management.

With these proactive measures in place and being expanded, it is hoped that managers will now consider taking steps to identify the true causes of fires and in so doing implement steps to prevent them from reoccurring.

In our final article in the next edition we will discuss training opportunities.

For more information about fire investigations, taking advantage of preliminary investigations at no charge, setting up and coordinating a multi-agency task team, or arranging presentations for your staff, please contact Rob Erasmus at enviro@absamail.co.za. ▲



Do not assume that all roadside fires are caused by cigarette butts



An example where at least 3 cigarette butts landed in dry fine fuels but did not start a roadside fire.



Any items discovered near the origin MUST be left intact to be properly documented and collected by a qualified investigator. Failure to do so could render the evidence inadmissible in a court of law



In cases of suspicious fires, first responders have an important role to play in identifying and protecting the general origin and not destroying fragile evidence with powerful water jets

History and traditions of the fire service

By Lenny Naidoo

The words 'brotherhood' and 'tradition' will always echo in my mind since joining the fire service. When one considers brotherhood the bible puts it so aptly.

Bible verse: "Man hath no greater love than this, to lay down his life for his brother." John 15:13. Team work is so critical to carrying out fire fighting and rescue activities safely. The fire department is always considered as family.

There is an old saying that goes like this "Not knowing your history and traditions is like having a tree without roots". This is very true as we modernise and get technically advanced, there are some traditions that fall away and the traditions that remain are not really understood. It is the case of carrying out a tradition but not understanding how the tradition originated. In many instances, a tradition that is not understood will eventually die a tragic death. The Great Fire of London that swept through the central parts of the English city of London, from Sunday, 2 September to Wednesday, 5 September 1666, saw the need to seriously consider fire fighting services in order to prevent such catastrophic fires and loss of lives. This fire consumed 13 200 houses, 87 parish churches, St Paul's Cathedral and most of the buildings of the city authorities. It is estimated to have destroyed the homes of 70 000 of the City's 80 000 inhabitants. The battle to quench the fire is considered to have been won by two factors: the strong east winds died down and the Tower of London garrison used gunpowder to create effective firebreaks to halt further spread eastward.

Fire hazards in the City of London

The city was essentially medieval in its street plan, an overcrowded warren of narrow, winding, cobbled alleys. It had experienced several major fires before 1666, the most recent in 1632. Building with wood and roofing with thatch had been prohibited for centuries, but these cheap materials continued to be used. The only major stone-built area was the wealthy centre of the city, where the mansions of the merchants and brokers stood on spacious lots, surrounded by an inner ring of overcrowded poorer



'Firehooks' used to fight a fire at Tiverton in Devon, England, 1612

► parishes, of which every inch of building space was used to accommodate the rapidly growing population. These parishes contained workplaces, many of which were fire hazards ie foundries, smithies, glaziers, which were theoretically illegal in the City, but tolerated in practice. 17th century fire fighting

Fires were common in the crowded wood-built city with its open fire places, candles, ovens, and stores of combustibles. There was no police or fire department to call, but London's local militia, known as the Trained Bands, was at least in principle available for general emergencies and watching for fire was one of the jobs of the watch, a thousand watchmen or 'bellmen' who patrolled the streets at night. Self-reliant community procedures for dealing with fires were in place and were usually effective. Public-spirited citizens would be alerted to a dangerous house fire by muffled peals on the church bells and would congregate hastily to fight the fire. The methods available for this relied on demolition and water. By law, the tower of every parish church had to hold equipment for these efforts: long ladders, leather buckets, axes, and 'firehooks' for pulling down buildings. Sometimes taller buildings were levelled to the ground quickly and effectively by means of controlled gunpowder explosions. This drastic method of creating firebreaks was increasingly used towards the end of the Great Fire and modern historians believe it was what finally won the struggle.

"A special Fire Court was set up to deal with disputes between tenants and landlords and decide who should rebuild, based on ability to pay. The court was in session from February 1667 to September 1672. Cases were heard and a verdict usually given within a day and without the Fire Court, lengthy legal wrangles would have seriously delayed the rebuilding which was so necessary if London was to recover.

Fire insurance marks were lead or copper plaques embossed with the sign of the insurance company and placed on the front of the insured building as a guide to the insurance company's fire brigade. The marks are common in the older areas of Britain's and America's cities and larger towns. It was used on the eighteenth and nineteenth century in the days before municipal fire services were formed. The UK marks are called 'Fire insurance plaques'. The first to use the mark was the Sun Fire Office before 1700.

British fire marks

For most of the 18th century, each insurance company maintained its own fire brigade, which extinguished fires in those buildings insured by the company and, in return for a fee to be paid later, in buildings insured by other companies. By 1825, fire marks served more as advertisements than as useful identifying marks; some insurance companies no longer issued fire marks and those that did sometimes left them up after a policy had expired. Successive combinations of fire brigades led to virtually the entire city of London being put under the protection of the London Fire Engine Establishment, which fought not only the fires of policy holders but those of nonsubscribers; the reason being that fires in uninsured buildings could rapidly spread to insured buildings.



Fire mark of the Hand in Hand Fire and Life Insurance Society on a house in Dulwich, UK

American fire marks

Fire insurance has over 200 years of history in America. The early fire marks of Benjamin Franklin's time can still be seen on some Philadelphia buildings as well as in other older American cities. Subscribers paid fire fighting companies in advance for fire protection and in exchange would receive a fire mark to attach to their building. The payments for the fire marks supported the fire fighting companies. Volunteer fire departments were also common in the United States and some fire insurers contributed money to these departments and awarded bonuses to the first fire engine arriving at the scene of a fire.▲

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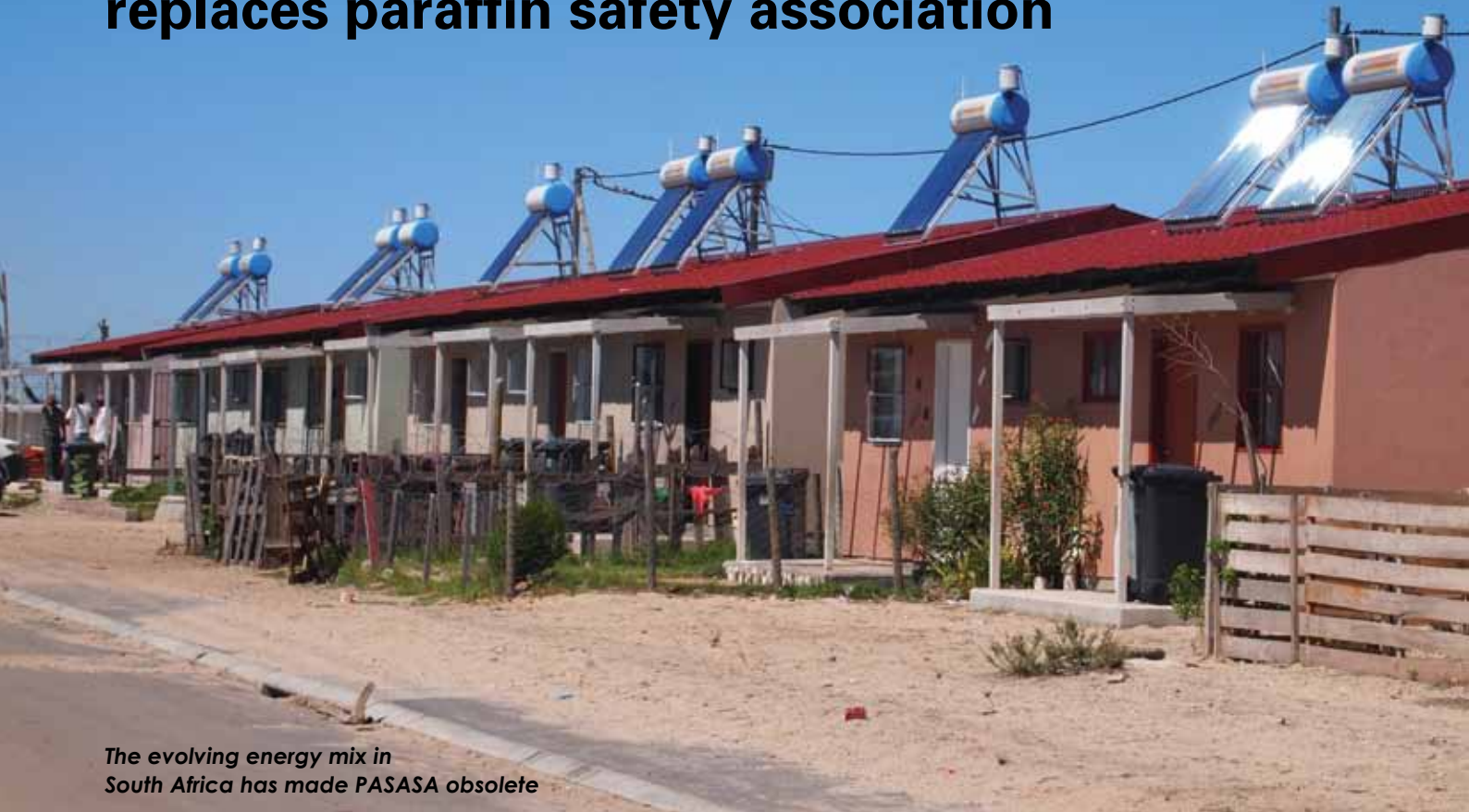
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Integrated energy organisation replaces paraffin safety association



The evolving energy mix in South Africa has made PASASA obsolete

The Household Energy Safety Association of Southern Africa (HESASA) has been established following the closing of the Paraffin Safety Association of Southern Africa (PASASA) in mid-2013.



Patrick Kulati

The newly established, HESASA, will continue in the pioneering work done by PASASA, which was established in 1996 to create awareness of paraffin safety by educating communities on the safe use of paraffin and appliances.

One of the reasons for the establishment of HESASA was to support the Integrated Energy Centres (IEC) programme introduced by Government to promote liquefied petroleum gas as a domestic energy fuel, is one of the reason for PASASA's closure, which can be attributed to a growing energy mix usage in South Africa. A report by the South African Petroleum Industry (SAPIA) showed that paraffin sales have decreased substantially in recent years.

HESASA seek to promote access to energy for people in areas of greatest in order to facilitate socio-economic development. A report by the South African Petroleum Industry (SAPIA) showed that paraffin sales have decreased substantially in recent

years as people use more sources of energy including gas, electricity, wood and candles.

A study conducted by the University of Cape Town's (UCT) Energy Research Centre in 2012 found that there is a clear need for an organisation that can engage with Government stakeholders and collaborate with partners in the energy sector to lobby and advocate for improved energy safety at policy and community levels. The study by UCT showed that there was an increase in the number of low income households that use a mix of energy sources including electricity, paraffin, wood, candles and gas.

These findings led to a strategic decision to move away from PASASA's historical focus on paraffin safety only to include interventions that address all aspects of household energy safety.

HESASA was formed following a decision to focus on all the ►

Fire Protection Association's area spans one-million hectares

The Zululand Fire Protection Association (ZFPA) in KwaZulu-Natal (KZN) Province, South Africa, encompasses an area from the Thukela River in the south to the Mozambique Border in the Manguzi region in the north.

The area of the FPA runs well over a million hectares and includes communities, private land ownership and parastatals, although only 320 000 hectares of land is registered

with the ZFPA, says ZFPA fire protection officer (FPO), Tony Roberts.

The umbrella FPA (UFPA), which is the KZNFFPA, provides logistical support to all FPAs in the province and facilitates interaction with Government at a provincial level to the ZFPA and the 22 other FPAs operational in KZN.

Roberts says that the KZNFFPA is working hard at bringing the community land

areas and some parastatals onto the ZFPA membership. ▶



Carl van Loggerenberg, Tony Roberts and Ralph Dobeyn

▶ communities across all living standards, with a huge focus on the low income communities. The new legal entity, HESASA, absorbed the operations of PASASA into its broader and more diverse mandate upon its registration in May 2013, explains HESASA CEO, Patrick Kulati.

Kulati says that HESASA has its roots in the work done by PASASA, which includes lobbying support from industry, regulatory organisations and Government for improved policies and legislation to prevent the sale of dangerous paraffin equipment, while also ensuring that the fuel is sold in safe, appropriate, childproof containers.

The aim of HESASA is to promote household energy safety solutions through research, education and communication in cooperation with various stakeholders. The organisation seeks to establish itself as an authoritative evidence-based organisation on household energy safety.

Kulati says that the goal of HESASA is to ensure that consumers and households experience significantly lower levels of harmful household energy incidents by the end of 2016.

"Partnership with energy industry players is also crucial," he adds.

Governance

HESASA is governed by a diverse board of trustees, with a wide range of skills and expertise in the fields of energy

policy, energy safety, injury prevention, research and governance.

The board includes former Minister of Energy in South African government, Buyelwa Sonjica and head of the department of pediatric surgery at the Red Cross War Memorial Children's Hospital, Professor Heinz Rode.

Other members of the board are Kgomotso Matsunyane, a business woman, senior researcher at the Medical Research Council, Prof Ashely van Niekerk and an academic at University of Johannesburg, Prof Harold Annegarn.

Household energy strategy

HESASA will have an important role to play in leading a national integrated household energy safety strategy and coordinating the voices of communities and stakeholders to advocate for a national household energy safety policy, says Kulati.

"This objective is based on founding principles of integrity, accountability, innovation and excellence," he adds.

HESASA will focus on the safety and quality of all household energy sources, technologies and appliances, as well as on the scrutiny of energy resource supply chains including packaging, labelling and transport, the efficiency of fuels and appliances and the regulation of household energy appliances, explains Kulati.

In addition, Kulati explains that the organisation will play a crucial

role in the provision of training and awareness-raising campaigns across the country and will be a key resource in terms of its surveillance, collation and management of evidence-based information and knowledge on matters relating to household energy sources, the use thereof and associated challenges and hazards.

Through its lobbying and advocacy activities, HESASA will also play a central role in the development and implementation of a national household energy safety policy in South Africa.

Long-term objectives

In the mid to long-term, HESASA aims to broaden its reach beyond South African borders to share lessons learnt on household energy safety with neighbouring Southern African Development Community (SADC) countries, reports Kulati.

The objectives of the organisation include developing and implementing an integrated household energy safety policy.

The organisation hopes to ensure that consumers are well informed about safe household energy use and that all South African household energy carrier systems and technologies meet world-class safety standards.

The key activities in achieving its goals include conducting research, education and training, as well as lobbying and advocacy. ▲



The ZFPA dispatches aircraft in support of foresters and on days when FDI exceeds 46 yellow

► The community land area includes the Ezemvelo KZN wildlife game reserves, community game reserves, as well as private game reserves and nature reserves. The Ngonyama Trust and other Tribal areas are vital as part of the FPA membership as well.

The operations centre for the ZFPA is based in Kwambonambi, a town slightly to the northwest of Richards Bay and some 26 kilometres from uMhlatuze City. A Firehawk camera detection centre has been acquired for the operations centre, which also serves as the base of the ZFPA incident command (IC) centre.

Roberts says that there are 17 fire detection cameras in the area covered by the ZFPA and these are strategically placed in the timber afforestation areas. He says, "Images of smoke and fire are relayed back to the central operations centre from where the first responder fire fighters are activated."

An electronic regional fire protection plan has been developed by the FPA, which encompasses the whole FPA area from the Thukela River to the Manguzi region on the Mozambique border to assist with the management of fire in the FPA.

Fire protection committees

Roberts says that the ZFPA is made up of approximately 20 members from various membership tiers that meet

monthly as an executive committee. Including the FPO, the ZFPA also has a chairman, Ralph Dobeyn, a vice-chairman, Ian Harrison and a secretary, Ilze Jansen van Rensburg.

An operations committee (OPSCOMM) has been formed by the KZN FPA and also FPOs in the province, as well as government officials subscribe to the OPSCOMM. Roberts says that this is a vital forum where matters of 'mutual benefit' can be discussed.

He says, "The KZN FPA is also mandated by the operations committee to negotiate certain issues on their behalf that would otherwise be taxing on the FPO."

Roberts says that the detection centre has become increasingly important with regards to information dissemination. "High fire danger index (FDIs) are communicated to members throughout the year and increasingly twice a day during the fire season from July to October. It has to be understood that Zululand has a year-long fire season, but more so during July and October."

He says that high discomfort indices, as well as the incidences of lightning are also communicated to members. "The FPO is responsible for issuing burning permits to all its members and to ensure compliance with the National Veld and Forest Fire Act 101 of 1998."

Wildfire statistics

The ZFPA experienced 247 fires during the 2013 fire season, which is a slight improvement on the 282 fires experienced in 2012.

Roberts says, however, that fires and intensity of fires is very much related to rainfall. "During 2013, the months of January and February saw five fires in the two-month period. The rainfall over the same period amounted to 436 millimetres. January and February 2014 have been vastly different and the number of fires rocketed to 96 over the same period and rainfall a mere 86 millimetres," he says.

Deliberate fires or suspected cases of arson account for a greater percentage in the initial weeks, adds Roberts.

From mid-February to June, the Zululand honey season starts and a migration of people ensues. Roberts says that many travel to the region to capitalise on this resource and 'make money by raiding these hives' and selling honey along the roadsides or back into the communities.

"We strive to work with the roadside sellers and through the 'BEEWISE' project, in association with Safire, smokers and T-shirts are issued to these roadside sellers and therefore a happy association exists with them," he says.

A problem arises, however, when wildfires are started by the honey gatherers as they use pieces of clothing to smoke out the bees from the hives. The bees become agitated and aggressive attacking the raiders, who then leave behind the lit cloth as they flee and this can ultimately lead to wildfires, explains Roberts.

"In most cases, the fires are more nuisance than of serious nature, but then again there are some really bad ones that can quickly get out of control, especially in an area of essentially indigenous bush between plantations," he says.

"For the rest of the season, suspected arson fires are the order of the day. The mix is generally: deliberate (suspected arson) around 55 percent, honey gatherers 35 percent and the other 10 percent made of vehicle, trains and neighbours." ►

►The number of hectares burnt in the region over the past year was in the order of 210 hectares of timber plantation. Roberts says grass and cane fires were prevalent, but these do not constitute major losses except for rearranging the burning regime.

Roberts says that the region recorded one fatality last year, owing to a fire in the Mtubatuba area after cane was burnt on a high FDI day and the fire burnt out of control.

Fire equipment

The ZFPAs operations centre is responsible for despatching aircraft in the event of a fire being detected on days where the FDI is set to exceed FDI 46 yellow or should a forester call for aerial support if the FDI is below 46 (Green), explains Roberts.

He says that 27 of the 247 fires experienced last year were aircraft fires and a total of 76 hours were flown with the Ayres Turbo Thrush bombers. "A Cessna 182 spotter aircraft guides the bombers onto the fire and calls the drop," adds Roberts.

He says that the ZFPA does not own any fire fighting equipment, although the FPA does have office and IC assets for managing day-to-day operations.

All fire fighting equipment is owned by the landowners or their contractors. In some cases, a lease agreement exists between contractors and corporate companies, who are owners of the equipment.

Members pay a levy to the FPA that covers the cost of a range of services provided by ZFPA including the Firehawk camera detection system service provider, Alasia Marketing. Other service providers to the FPA include Orsmond Aviation for aircraft to be based in Kwambonambi for four months of the year for fire bombing operations and Alton Aero for a Cessna 182 spotter, as well as salaries and other project expenditures.

Roberts says that the responsibility of the FPO is to ensure compliance within its membership with regard to fire-fighting equipment and the use thereof.

Integrated fire management

The ZFPA partners with a Working

on Fire (WoF) crew for community relations and fire awareness projects, as well as to conduct prescribed burns, firebreaks and buffer-break clearing.

The WoF crew is also used at mopping up operations at plantation wildfires by forestry companies.

"The use of the WoF teams to mitigate fires emanating from high risk areas is extremely important. The teams assist schools with firebreaks and run Firewise programmes with the learners and teachers," says Roberts.

The fire awareness programmes and safety demonstrations undertaken by the ZFPA are conducted with communities in the region in conjunction with the uThungulu District Municipality disaster management officer. Roberts says that the fire safety demonstrations are always well received in the local communities. "There are always positive feedbacks from these communities and there are always calls for further visits," he says.

"During high FDI days the use of our East Coast Radio has always been met with excellent support and through live broadcast, information is fed directly through to the listener; be it that the person is in a motor vehicle or in any building," says Roberts.

Effort has now been made to identify all the radio networks in Zululand for this coming year to be able to disseminate the information to other road users, as East Coast Radio does not cover all radio listeners in the region.

"The use of the WoF teams throughout the FPA will be further encouraged with the various local municipality disaster managers within their respective community areas.

The FPA is currently looking at information boards to be erected along the N2 in an effort to make the public more aware of the dangers of fire.

The local newspapers namely, Zululand Observer, Zululand Fever and Baywatch are used to great extent to disseminate valuable information through this medium and report backs are very positive, states Roberts.

He says that the high risk fire areas in the region are associated with communities alongside the some 120 000 hectares of plantations. "Much effort is applied through Firewise programmes to reduce the numbers of fires emanating from these communities."

Challenges

Roberts says that the ZFPA is faced with a few challenges with regards to fire and fire risk reduction.

He says that the 'unidentifiable honey gatherers' remains a challenge of its own and an attempt is underway to get information on these gatherers.

Also, some community members are still prone to burning grass and rubbish or even cane on days not conducive to burning even though the Firewise programmes may have been demonstrated in that area.

"This could be put down to a lack of knowledge on the day of dangerous conditions. The use of isiZulu based radio stations is important in getting the message out. These stations, however, require payment for the service presenting us with another challenge," says Roberts.

As part of its fire mitigation strategies and programmes, the KZN FPA is actively engaging with numerous parastatals whom are not members in an effort to broaden the membership of the various FPA's.

"This then gives the FPA's a broader spectrum to work with and possibility of community-based fire committees being established," says Roberts. ▲



The ZFPA flew a total of 76 hours with the Turbo Thrush bombers to combat fires in 2013

2014

April

1 – 3 April 2014

Fire and Emergency Middle East 2014

Trade exhibition, state-of-the-art equipment

Venue: Abu Dhabi National Exhibition Centre, Abu Dhabi, United Arab Emirates

Website: www.femexpo.com

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:

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

Venue: Indiana Convention Centre and Lucas Oil Stadium, Indianapolis, USA

For more information visit: 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 adjuncts

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

Venue: Action Training Academy, 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

Venue: VVC Exhibition Centre, 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

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 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

Venue: Marina Bay Sands Convention Centre, Singapore

Contact: Email: steven@cems.com.sg

For More Information visit:

www.firedisasterasia.com.sg

29 April – 3 May

Fire-Rescue Med (FRM)

Each spring, Fire-Rescue Med is the conference for fire-based EMS leaders, including new and aspiring chiefs, providing education and training on hiring and retaining EMTs, public and private integration challenges, embracing technology, billing for services, illness prevention programs and more

Venue: Las Vegas, Nevada, USA

For more information visit: www.iafc.org/frm

May

4 May 2014

International Firefighters' Day (IFFD)

5 May 2014

Basic fire fighting module

The basic theory of fire, methods of extinguishment, components, operations and practical use of fire extinguishers and hose reels

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

6 May 2014

Basic Life Support (BLS) for Healthcare Providers

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

5 – 9 May 2014

Fundamentals of fire investigation

The programme will promote a clear understanding of fire investigation and the rendering of opinion regarding origin and cause. It includes practical investigation exercises and the programme is now aligned with NFPA 921

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

7 – 8 May 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

12 – 13 May 2014

Paediatric Advanced Life Support (PALS)

Candidates will be able to perform a systematic approach to the assessment of a seriously ill or injured child, recognise and manage a child in respiratory distress and failure, compensated and hypotensive shock

Venue: Action Training Academy, Fourways, South Africa

Contact: Gugulethu More Tel: 011 450 4981

Email: gugulethu.more@ata-international.com

12 – 16 May 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, Gauteng, South Africa

Contact: Christine van der Westhuizen

Tel: 011 397 1618

Email: college@fpasa.co.za

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

12 – 21 May 2014

Quad County Truck Academy

A truck training academy and instruction series hosted by Eagle Fire Department and covering various aspects of fire fighting including building construction, vertical ventilation, search and rescue, forcible entry, aerial operations and other disciplines

Venue: Eagle Fire Department, Idaho

Contact: Bill Stone Tel: 001 208 939 6463

Email: bstone@eaglefire.org

13 May 2014

Euralarm Conference

Safe and Secure Solutions for Smarter Cities
The international Euralarm Conference will address how the Fire and Security Industry can contribute to three of the initiatives for "Smarter Cities":

A. Public Emergency Alarm & Response in Crisis situations

B. Fire Safety and Security in Hotels

C. Smart safety and security in cities in 2020
Presentations and panel discussions will be insightful and provide a view of the security needs for the future with an opportunity to contribute to the panel discussions.

Venue: Juan les Pins, Nice, France

Contact: Sophie Zulinski

email: zulinski@mondial.at

13 – 15 May 2014

IFSEC South Africa 2014

Venue: Gallagher Convention Centre, Midrand, Johannesburg, South Africa

For more information visit: www.ifseca.com

14 May 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.fpsa.co.za

19 – 20 May 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

19 – 23 May 2014

Large Wildland Fires: Social, Political & Ecological Effects

International Association of Wildland Fire and the Association of Fire Ecology
The causes and effects of large wildland fires are the subjects of great debate among fire researchers, managers, and policymakers. Are large wildfires unnatural events, causing great ecological harm that should be suppressed at all costs? Or could they provide opportunities to reduce fuel loads and restore ecosystems altered by past fire exclusion, and improve resiliency in the face of ongoing climate change? What are the latest research findings, management treatments, and policy initiatives addressing large wildfires?

For more information go to:

www.largefireconference.org

26 May 2014

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.fpsa.co.za

26 – 27 May 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

Venue: Action Training Academy, Fourways, South Africa

Contact: Gugulethu More Tel: 011 450 4981

Email: gugulethu.more@ata-international.com

26 – 29 May 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

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.fpsa.co.za

29 May – 1 June 2014

International Hazardous Materials Response Teams Conference

A Hazmat training programme hosted by the International Association of Fire Chiefs (IAFC)

Venue: Hilton Baltimore, Maryland, USA

Contact: Ana Davison Tel: 001 703 537 4829

Email: adavison@iafc.org

For more information visit: www.iafc.org

June

2 – 6 June 2014

CFPA Europe Certificate in Principles of Fire Safety Engineering

Application of fire safety engineering principles to the design of buildings and includes input drawn from associated published documents (PD's) that deal with issues that are primarily associated with life safety

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

Contact: Christine van der Westhuizen

Tel: 011 397 1618

Email: college@fpasa.co.za

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

6 – 7 June 2014

Toughest Firefighter Alive Competition

This year the City of Cape Town Fire and Rescue Services will be hosting the 3rd South African Open Toughest Fire Fighter Alive competition. Expanding on the success of this event last year, fire fighters from various different municipalities, the Armed Forces, ports authority, aviation and many more are expected to participate in 2014.

Venue: Good Hope Centre, Cape Town

For more information visit and to register:

www.capetown.gov.za/en/FireAndRescue/Pages/AbouttheTFA.aspx

9 – 12 June 2014

NFPA Conference and Expo

The premier event in fire and life safety

Venue: Mandalay Bay Convention Centre, Las Vegas, USA

For more information visit:

www.nfpa.org/conference

10 – 12 June, 2014

Emergency Management and Crisis Response Summit – Middle East

Day 1 Aviation, Day 2 Infrastructure, Day 3 Oil and gas

A platform for industry leaders, sector experts, government agencies, and other stakeholders to collaboratively learn, share, and develop stronger emergency management and crisis responses. This three day summit, tailor made for industry professionals from aviation, infrastructure, and oil and gas, will provide in-depth industry-specific insights

Venue: Dubai, United Arab Emirates

Contact: Jawad Ahmed, Project Manager

0091 982 237 5727

Email: jawad.ahmed@micequotient.com

11 June 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

11 June 2014

Fire fighting and evacuation model

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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.fpsa.co.za

11 – 14 June 2014

Fire 2014 and NYSAFC 108th Annual Conference

The event will feature fire education programs and EMS workshops, as well as hands-on training and exhibits. It is billed as the Northeast's premier emergency services conference and expo

Venue: Turning Stone Resort, New York, USA

Contact: Email: ssyzdek@nysfirechiefs.com

For more information visit:

www.nysfirechiefs.com

12 – 13 June 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

15 – 18 June 2014

The World Conference on Disaster Management

The conference seeks to provide a unique venue for disaster management professionals from around the world to present, network and learn

Venue: Metro Toronto Convention Centre, Toronto, Canada

For more information visit: www.wcdm.org/

What is a fire fighter worth?

There has been so much talk recently about things like containing costs, lowering taxes and those who work in public safety being overpaid - particularly fire fighters - that it could make your head spin. We've all done the 'simple math', crunched the numbers and it all seems to boil down to a simple question. What are fire fighters worth?

I guess that depends. We live in a country that seems to have forgotten what our priorities are. A man can be a skilled athlete who happens to throw and catch a football well, and make millions and millions of dollars to do so. And we as a society are not only OK with that, but we gather in front of our televisions and cheer that man on.

Meanwhile, a fire fighter kisses his children goodbye before every shift knowing the harsh reality that it very well could be the last time he will see them and he is fighting tooth and nail for decent health coverage and substantial pay to support those children.

He is the man that you call when your elderly father has a stroke. He is the person that will extract your 16-year-old son from a mangled vehicle on the highway in the middle of the night. He is the person that will be there in a heartbeat when your new-born infant stops breathing.

He is the person who is exposed to countless dangerous scenarios and has seen horrific things during his career that would psychologically haunt most of us for the rest of our lives.

We trust him to save our homes and belongings in the event of a disastrous fire and we trust him to keep us breathing and our hearts beating when we face our most critical moments.

What is he worth to you?

He sometimes will go days without sleep and make life altering decisions on every call he shows up to. He has missed family meals, bedtime stories, Christmas mornings, school plays, anniversaries, Thanksgiving dinners and his own children's birthdays.

We all know that life is so very short and firefighters sacrifice precious time with the most important people in their lives to save the lives of the most important people in yours.

And now they have to defend and protect their pensions, well deserved health benefits, and their pay cheques. It has been proposed by some that they lose many of their benefits and work extra shifts that they will not be compensated for.

There seems to be a serious misconception that fire fighters are in it for the monetary gain and more and more often have been portrayed in a negative light for actually expecting to be compensated for the sacrifices that they make to do their job. For an individual that has chosen this selfless career, it begs the question: Is it worth it?

Most of us are willing to pay a little extra for something if it is important to us, whether it be the shoes we wear, the doctor we choose to treat us, or even the cup of coffee we drink. It is something that we value; therefore it is worth the cost. Most would agree that our safety and protection is of immeasurable value.

Those of us that are skilled in math may look at the numbers and think that stripping those who serve our public of their way to earn a decent living is an answer to a financial equation. But fire fighters and their families are not numbers on a piece of paper.

They are human beings that are doing their jobs every day to the best of their ability, and possibly sacrificing their own lives for the life of a stranger.

So before making our minds up that fire fighters are the financial problem, sit down with a local fire fighter and ask him about his job. Ask him about his wife and his sons or daughters, what kind of house he lives in and what type of car he drives.

And then ask yourself, if you were to take on such a career, what would you expect in return?"

Author: Tina Clarke

Proud wife of Cumberland fire fighter, Bryan Clarke

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Thank you to Brotherhood of Fire for sharing this.

FRI thanks Tina Clarke for the kind permission to reprint.



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