FIRE AND RESCUE INTERNATIONAL

integrated fire, rescue, EMS and disaster management technology

Volume 2 No 4

DISASTER RISK REDUCTION

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FIRE AND RESCUE INTERNATIONAL

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Comment

Lee Raath-Brownie

Fire and Rescue International (FRI) is proud to present its 16th edition of this niche-market publication. We feature the customary international and local news updates, practical knowledge, inspiring excerpts, a fire protection association and general industry information. We trust that you will enjoy reading our magazine as much as we enjoyed writing it!

Cover profile
Safire Insurance Company Limited features on our front cover this month and we profile this leading short-term insurance company.

FRI Images photographic competition
A surreal night scene earned one of FRI's readers R2 000. See page 3 for details. **CONGRATULATIONS!**

You too can be a winner. Submit your high-resolution photograph featuring a rescue, emergency, incident or fire scene and win R2 000 cash!

News section
We mourn the passing of the 19-member Granite Mountain Hotshots fire fighting crew who were killed in Arizona. A truly sad day in the history of wildfire fighting. This month's edition also features several devastating incidents including the floods in India, forest fires in Indonesia, train explosion in Canada, plane crash in San Francisco, a building collapse in India and various other incidents. We also announce the eight finalists in the Centrum Guardian project and review the fire fighting skills competition held in Sabie, South Africa. FRI was also fortunate to attend the joint training session with South African Air Force 22 Squadron and NSRI Station 29 at Melkbosstrand in Western Cape, South Africa.

Training
The FRI training focus falls on the Human Emergency Life Programme (HELP). We visited the academy and profile its expertise.

Incident command
We feature the recently held incident command summit held in the Western Cape, South Africa and discuss the outcome of this critical multi-agency event.

Fire protection association
The Southern Cape Fire Protection Association (SCFPA) is featured this month and we outline the SCFPA's area of coverage, resources, management and regional statistics.

Psychology
Lenny Naidoo, a regular contributor to FRI, writes about the use of psychology to support building design and safety. Naidoo quotes from various research done on building design and the reactions of people during an incident.

Leadership
Another contributor, Wayne Bailey, writes about the importance of acting like a leader before the position is bestowed on you.

Rescue training
Schalk van der Merwe of the Cape Peninsula University of Technology, shares his experiences during a combined rescue training exercise. Van der Merwe, a lecturer at the University, discusses the intricacies of the training exercise and elaborates on the various outcomes.

Advancing handlines (2)
Colin Deiner, FRI's technical writer, continues his explanations of stretching and advancing of handlines, sharing his hands-on experience with FRI readers. This indepth discussion includes the ideal actions and positions of the crew members and teams, crew size, fire streams and backup. Deiner reiterates the importance of being on top of your game.

Wildfires
Dr Neels de Ronde shares his insight and opinion regarding the 2012 wildfire season in the Free State and Northern Cape in South Africa.

Grassland conference
FRI journalist, Sylvester Haskins, attended the recent Grasslands conference in Limpopo, South Africa and reviews the presentations and demonstrations during the event.

IFSEC 2013 exhibition and conference
We review the recently held fire and security technology showcase, IFSEC 2013 exhibition and conference.

We thank all our readers, advertisers and contributors for their continued support. Fire and Rescue International is your magazine. Read it, use it and share it!

Lee Raath-Brownie
Publisher

This month's FRI images winner!

Congratulations to

Pieter van der Merwe for his *"Night sky"* photo taken with a D80 Nikon Camera and a Nikkor 18-200mm lens on night scene setting.

Photo description:
Photo was taken while burning firebreaks on Sappi plantation Torburnlea

Well done!

Pieter van der Merwe wins this month's prize money of R 2 000!

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

WIN R 2 000 every month!

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!

Pierre Bekker

Fire cover an essential element for timber growers

Lightning strikes and freak high temperatures have sparked deadly bush fires in California and Colorado, in the US and Australia and the Western Cape, South Africa, this year, resulting in loss of life and billions of US dollars' worth of damage to property, reports short-term insurer Safire Insurance Company Limited.

Safire states that when fanned by high winds, fire fighters can do little to hold back the encroaching wall of flame and the deaths of 19 specialist fire fighters in California is horrific proof of how even experts can succumb to nature's fury. For individuals without insurance cover, the future depends on the charity of the state, friends and family. For commercial timber growers, insuring their assets is an essential element of their business.

Safire has a proven track record dating back to 1987, when a group of farmers and timber-growers pooled their resources to create an insurance cooperative to insure their timber at an accessible rate.

Initially called the Central Timber Fire Protection Cooperative Limited (CTFP), the organisation operated a scheme whereby members' claims were settled from a central pool of reserves made up of members' contributions. A reinsurance treaty was simultaneously established with underwriting syndicates at the renowned Lloyds of London, to cover the catastrophic portion of the risk.

In 1997, with the advent of the General Short Term (GST) programme, Safire's insurance cover was extended to include non-plantation short-term insurance to cooperative members, states current Safire CEO, Pierre Bekker, who is the son of one of the original founding members, Bailey Bekker.

"The cooperative's name was changed to South African Fire and General Protection Cooperative Limited and Safire began to offer general short-term insurance, namely general property and casualty insurance, to the agricultural sector where it had already made its mark and established a firm base of supporters," states Bekker. He says, "These clients understood cooperative insurance and the limitations thereof, namely that claim payments would be limited to the extent of the cooperative's pool of reserves, a situation that they were very comfortable with as they knew the high level of reserves available and Safire's firm and longstanding associations with major international reinsurers."

Fully-fledged insurer

Early in 1999, Safire made a decision to convert from a cooperative to a fully-fledged insurance company, a move that came about the following year.

Despite this transformation, the company retained its cooperative philosophy while broadening its short-term insurance product range to a wider market. Its clients are still viewed as members of a self-insurance scheme and Safire practices a policy of selectivity, choosing clients that are risk-averse and responsible, so that these clients do not support negligent, high risk individuals, states Safire. In this way, the company sustains a sizeable pool of resources from low claim levels and past profits, resulting in extremely competitive premiums and ensuring that it has support from its international underwriters plus its own extensive reserves. ▶

Today, Safire is a leading short-term insurer offering a comprehensive range of insurance products that is tailor-made to suit its clients' individual needs, states the company. The Safire Insurance product range includes commercial, domestic, agriculture and guarantee cover, as well as first and third party cell captives as part of its alternative risk transfer (ART) business. "So, even though its roots are in timber, Safire now covers a wide spectrum of insurance products," reports the company.

Niche products

Safire continues to develop special niche products especially for the agricultural sector, its original marketplace, which has been loyal to the company. At the end of last year it launched a structured insurance package for dairy farmers. Safire also provides crop insurance for sugar cane and macadamia farmers, in addition to its other comprehensive short-term cover. This dedication to its original customer base has paid off, as over 70 percent of Safire's original clients from its co-operative days are still with the company today.

Plantation insurance remains a significant part of Safire's business, with the company offering 'peace-of-mind' to a wide spectrum of commercial timber growers. Safire reports that is able to structure insurance packages for any client, large or small, to cover their specific requirements and situation.

Owing to new legislation that restrict the issue of new timber permits, Safire has turned its energies to ensuring that its existing client base is superbly serviced and that premiums are retained at sustainable levels.

Safire's general manager of crop and agriculture division, Ruth Bezuidenhout, is actively involved in liaising with government and forest bodies, along with other Safire representatives, in order to ensure the company's involvement at all levels of the industry. The company also networks with organisations that undertake research into issues that affect the timber industry, such as timber disease.

Expert consulting

Safire is recognised as an industry expert and has been asked to assist with the development of the timber industry throughout Africa. The lure of carbon credits is attracting major investment and the continent is seen as ripe for the development of commercial plantations to offer a vital source of employment to rural and largely uneducated populations. Commercial plantations that are well-managed and run efficiently would also offer a sustainable source of timber to protect the fast-disappearing natural forests, reports Safire.

Safire offers 'peace-of-mind' to a wide spectrum of commercial timber growers

In addition to its advisory work locally and throughout Africa, 'Safire values its relationships with individuals' and efforts are made to assist with high risk problems that might affect both, the insured and the insurer, as well as the wider community, reports the company.

"Safire's advertising campaign is based on the theme of symbiotic relationships, such as a bee and a flower, a sheep dog and its flock and our slogan of 'Short-term insurers, long term partners' describes how strongly we at Safire feel about the importance of mutually beneficial associations," says Bekker. He adds, "With the industry's rationalisation post-9/11, other insurance companies pulled out of plantation insurance, which has a large catastrophic element of risk. Eventually, Safire was the only one to offer plantation cover. Safire started out in an incredibly hard market, but we maintained our low premium levels and didn't take advantage of the situation. We didn't hike up our rates, so reducing premium volatility and we became known as a responsible insurer, something our clients have never forgotten."

Bekker mentions that there have been vast changes in the country's agricultural sector through land reform, which has been a huge challenge for the company, as there has generally been deterioration in risk management. "In addition, there has been a consolidation, a shift towards a small group of larger players in the forestry industry and agriculture in general rather than many small operations, leading to a reduced number of potential clients. As mentioned, Safire has for many years been the only plantation insurer consistently serving this market and we feel very responsible for the need to be able to offer cover to even high risk clients, which is a departure from our original philosophy. We try to find innovative ways to provide cover to high-risk operations and individuals that we previously wouldn't consider and have moved from choosing our clients to creating insurance solutions for certain high risk plantation clients," explains Bekker.

These individuals or corporates might be deemed high risk through no fault of their own. Safire has reverted to using its original cooperative model and differentiates between various levels of clients with three financially independent pools of resources so that there is no cross-subsidisation between high risk and low risk clients.

Plantation insurance is a significant part of Safire's business

Safire has also become actively involved with incentivising and assisting these high-risk clients, helping to alter their specific circumstances by doing research and then advising them on what steps to take to improve their level of risk and so improve their premiums. Bekker says, "Fires cross boundaries and jump fences, so this is for the benefit of all and is a major element of our field extension services. This wider social awareness and community work is a critical part of doing business in South Africa today."

Sustainable farming

Safire's investment in various projects that promote the safe and sustainable harvesting of honey, which is a major cause of man-made fires in outlying rural areas and plantations, is an indication of its commitment to social awareness and community work.

Safire and its plantation clients identify key individuals in rural communities to help educate and assist the communities and ensure a good working relationship between all landowners. The company donates smoker units, which ensure that honey can be removed in a safe and responsible manner and distributes t-shirts so that the 'honey-harvesters' can be identified.

Devastating and widespread fires in 2007 and 2008 put Safire's strong relationship with its reinsurers to the test. These years proved to be the worst that Safire and the forestry industry had experienced in terms of losses, but because of its proven track record and these strong ties, Safire lost none of its reinsurance support from its international and local reinsurers, reports the company.

Bekker says that reinsurers have guaranteed Safire an extended insurance capacity for a future three-year period, which is the first time this has ever been done in this sector.

Teamwork

The focus on the power of relationships is evident in the structure and day-to-day operations of Safire Insurance. The management team is based at Safire's head office in Pietermaritzburg in KwaZulu-Natal and is made up of long-serving individuals who are committed to developing the company, while remaining in touch with individual clients.

"Safire does not operate through call centres," says Bekker. This means that insurance brokers deal with Safire personnel who are directly involved with a claim and/or underwriting file. A broker is employed to provide detailed advice and guidance, which is a special value added service that the company prioritises, as opposed to handling direct business.

"Timber touches every part of our lives. Its presence is evident in our furniture and our homes and offices in terms of construction. It is also found in more subtle ways, in clothing (tannins), laptops, cellphones and iPads (silicone)," states the company.

Timber is a multi-million rand industry offering employment to millions of people. It is vital that it is protected by an insurer that understands its needs inside and out, concludes Safire Insurance.

Elite 19-member fire fighter crew killed in Arizona wildfire

Fast moving wildfire in Arizona kills 19 fire fighters and destroys 200 homes

A crew of 19 fire fighters from the Prescott Fire Department in Arizona, US, were killed while attempting to create firebreaks to combat a wildfire in the region on 30 June this year.

The slain fire fighters were part of an elite 20-member crew of fire fighters who are tasked with getting as close to a wildfire as possible in order to effectively create firebreaks. The entire team, save one "look-out" fire fighter, was killed on 30 June, while they were digging the firebreaks and creating an escape route.

The wildfire destroyed 200 homes and burned about 900 hectares two days after it was started by a lightning strike on 28 June.

Prescott, Arizona fire chief, Dan Fraijo, said that the 19 fire fighters were part of the city's fire department. "We grieve for the family. We grieve for the department. We grieve for the city," he said in a media conference. "We're devastated. We just lost 19 of the finest people you'll ever meet."

Arizona state forestry spokesperson, Art Morrison, said, "In normal circumstances, when you're digging a fire line, you make sure you have a good escape route and you have a safety zone set up." He added, "Evidently, their safety zone wasn't big enough and the fire just overtook them." The fast-moving blaze was fuelled by dry grass near Yarnell, which was catalysed by wind as it raced through the homes.

Morrison said that the elite group was forced to deploy emergency fire shelters, when they were caught near the central Arizona town of Yarnell.

The crew had to deploy emergency shelters when 'something drastic' occurred, said Fraijo. He explained that emergency shelters consist of a protective fire-resistant material that is deployed in these highly hazardous conditions with the hope that the fire will burn over the top of the fire fighter.

"Under certain conditions there's usually only sometimes a 50 percent chance that they survive," said Fraijo. "It's an extreme measure that's taken under the absolute worst conditions."

The Yarnell Hill wildfire proved to be the deadliest wildland blaze for fire fighters in more than 35 years. Most residents had started to evacuate from the town as the fire lit up the night sky in the forest above Yarnell, which is a town of 700 residents. There were no reports of any injuries or other deaths in the days following the death of the Prescott fire fighter crew, report US media.

The Red Cross has opened two shelters in the area, one at Yavapai College in Prescott and another at the local high school gym. Before the 19 deaths in Arizona, a total of 43 fire fighters lost their lives thus far this year, according to the US fire administration.

Prescott, which is more than 30 miles northeast of Yarnell, is one of the only cities in the United States that has a hot shot fire crew, stated Fraijo. The unit was established in 2002, and the city also has 75 suppression team members.

More than 110 000 people rescued from flood-hit villages in India

Air rescue operations was vital as floods washed away bridges and roads in Uttarakhand

More than a week of Monsoon flooding devastated the Indian state of Uttarakhand in June

Early monsoon rains hit the northern Indian state of Uttarakhand in late June this year, triggering flash floods and landslides that resulted in the death of more than 5 700 people as of 16 July, according to Indian authorities.

Destruction of bridges and roads left about 100 000 pilgrims and tourists trapped in valleys leading to three of four pilgrimage sites in Uttarakhand. The Indian Air Force and the Indian Army, along with paramilitary troops, evacuated more than 110 000 people from the flood ravaged area.

Around 2 500 survivors were still to be evacuated from the flood hit area amid fears of an epidemic outbreak, with focus shifting to retrieving bodies buried in debris. Mass cremation of more victims was expedited in Kedarnath town, which bore the brunt of destruction from floods and landslides after heavy rains pounded the region.

Indo-Tibetan Border Police (ITBP) director, General Ajay Chadha, said that rescue operations in Kedarnath were over and confirmed that around 2 500 stranded people were still waiting to be evacuated.

Meanwhile, the fate of 3 000 people who were reported missing in the aftermath of the Uttarakhand flooding disaster in northern India, raised concerns as the rescue operations neared completion in late July.

The flooding in Uttarakhand began on 16 June and persisted for more than a week as rescue workers and the Indian army conducted rescue operations in Uttarakhand. Torrential rains washed away homes and roads and triggered landslides that cut off communication links with large parts of the state.

Thousands of people were stranded in high mountain passes in the temple town of Badrinath in Uttarakhand. Bad weather hampered rescue efforts for at least a week after the floods, as the India army attempted to evacuate the throngs of locals and tourists caught in the flood disaster.

About 10 000 army and paramilitary troops, members of India's disaster management agency and volunteers took part in six days of rescue and relief efforts. The army had rescued more than 80 000 people, by road and air, a week after the flooding and landslides devastated the region, stated a Government spokesperson.

Chief Minister of Uttarakhand, Vijay Bahuguna acknowledged that over 500 roads were damaged and 200 bridges washed away, complicating rescue efforts in the region. "Now rescue is solely by choppers, both of the air force and the 20 private choppers that we have hired. But they too have their limits," he said.

The Indian Health Department warned people in adjoining areas near Kedarnath not to consume river water as it may be highly polluted. With the air thick with foul smell of decaying bodies in the area adjoining the Kedarnath shrine, the department expressed apprehensions about spread of various diseases.

"We are now quickly cremating the bodies that have been recovered. But given the scale and nature of the tragedy, there is a likelihood that many bodies could still be lying in open spots, where rescue personnel have not been able to find or reach them," said nodal officer of rescue operations in Guptkashi, Ravikanth Raman.

The monsoon rains and subsequent flooding in Uttarakhand, which is popular for its holy Hindu shrines and river, is said to be the heaviest experienced in the region in the last 80 years.

Smog from the forest fires in Indonesia reach hazardous levels across Southeast Asia

Forest fires in Indonesia
pollute neighbouring Asian countries

The Southeast Asian neighbouring countries of Singapore and Malaysia were shrouded in smog after forest fires on the Indonesian island of Sumatra burned for more than two weeks in June, reported an international news agency.

The smog prompted an advisory alert in Singapore, asking people to remain indoors. Singapore's National Environment Agency (NEA) said its pollution index eased to a 'moderate' level after first soaring to 'unhealthy' high levels in the days following the fires.

The pollution level was the highest experienced in the region since 1997, reported a local newspaper in Singapore. The Malaysian state of Johor similarly registered high readings on the country's pollutant index, according to the country's Department of Environment. The Malay Peninsula has been plagued for decades by forest fires in Sumatra to the West and Kalimantan on Borneo Island to the East.

The annual fires in the region hit a peak in 1997, when the haze cost the economies of Indonesia, Malaysia and Singapore an estimated $3,5 billion, according to figures published by the Centre for International Forestry Research in Bogor, Indonesia.

At least 138 hot spots were detected over Sumatra in June, with hazy conditions expected to persist for the next few days, reported the NEA. The agency stated that the fires typically occur during a dry season for the region from June to September.

Eight finalists in Centrum Guardian project to make TV debut

Zanele Sibisi

Ronnie Ndlovu

Subsequent to the announcement of the eight finalists in the annual Centrum Guardian of the Year 2013 earlier this year, a media event to announce the screening of Centrum Guardian 2013 on national broadcaster, SABC 3, was held at the Johannesburg Botanic Gardens, South Africa in July.

The eight finalists selected for the Centrum Guardian 2013 project will be profiled in a seven-week documentary drama series on SABC 3, which will be hosted by popular television personality, Ruda Landman.

The show will comprise dramatic recreations of the stories and acts of bravery for which the finalists were nominated this year. The finalists are made up of either individuals or groups of fire and rescue personnel that responded to a particular life-saving incident. The eight finalists represent various character traits that range from 'Bold' which is represented by Newcastle Fire Station fire fighter, Zanele Sibisi, for her rescue of a man trapped in a bulk water pipe after while repairing a leak.

Ronnie Ndlovu was nominated in the 'Instinct' trait for his rescue of a women trapped on the edge of a watercliff in Howick, KwaZulu-Natal. The other finalists consisted of various teams of fire and rescue personnel that responded to any one incident, representing different traits from 'Instinct', to 'Spirit' and 'Drive'.

A new addition to the Centrum Guardian television series will be rescue technician and BTech Fire Technology graduate, Gerald Moswathupa, who will present a series safety tips in the television screening of the project. Moswathupa is currently the acting station manager at the Ekurhuleni Emergency Training Academy. He is responsible for coordinating and planning the content for fire and rescue courses.

Centrum Guardian brand manager, Natasha McDonald, says that the Centrum Guardian project marked a 'perfect opportunity' for the organisation to match the brand with the causes which it supports.

"The project recognises and acknowledges men and women in emergency medical services (EMS) and it is a project that is close to our hearts," said McDonald at the media announcement of the television series, which will start on 4 August 2013.

"We would like to thank SABC 3 for doing their part in honouring people of EMS," stated McDonald.

Public voting for the finalists kicked off on 1 July this year and closes on 11 September 2013. The winner will be announced at the finale event on the 12 September and will be showcased on television on the 15 September.

Voting can be done via short messaging service (SMS) with all proceeds of the SMS votes to be donated to the base station of the Centrum Guardian for 2013.

Team Brave

Team Reflex

Team Focus

Team Tenacity

Team Drive

Team Spirit

Train explosion in Canada wipes out entire blocks of buildings

The explosion of an oil-laden cargo train in Canada levelled blocks of buildings in a small town

A small town in the province of Quebec, Canada, was engulfed in flames after a freight train pulling over 70 tankers of crude oil derailed and burst into flames.

According to media reports, the inferno forced more than 2 000 from their homes in Lac-Megantic and caused the death of at least 15 people. Canadian police said they expected to find many more bodies in the days following the derailment of the oil-laden freight train, as 35 people were reported as missing by family members after the accident.

The train inferno hurled out from the tracks to nearby homes, levelling whole blocks in the centre of the town, destroying at least 30 buildings. Rescuers cautiously entered the debris a day after the spectacular crash that saw flames shoot into the sky and burn into the night. Popular bars in the town of Lac-Megantic, close to the blast site, were crowded at the time of the accident.

Local media reports stated that thick fuel spilled into the 180 kilometre Chaudiere River as fire fighters from both Canada and the US state, Maine, which borders Quebec, rushed to fight the blaze with at least 27 fire fighting vehicles.

"It is really just terrible," said Canadian prime minister, Stephen Harper, after visiting the devastated town. "There has been loss of life as we all know and there are still many, many people missing, so there are many people here who are very worried."

Harper stated that a large part of the downtown had been destroyed in the blaze. "We lost great buildings, the historical buildings that we had in Lac-Megantic have disappeared."

Quebec police force, Benoit Richard, spokesperson said the bodies that were recovered had been taken to Montreal for forensic examination. "All during the night we had a lot of investigators here on the scene to meet with people that might have seen anything that occurred during the fire," commented Richard.

Officials in Lac-Megantic say some victims were likely vaporised by the intense blaze, which burned for 36 hours after the crash. Of the roughly 2 000 residents that were evacuated from the centre of town, about 1 200 were permitted to return to their homes in the days following the incident.

Notices were placed on doors instructing residents how to clean and air out their homes. Officials suggested throwing out any food and boiling all water, because the city's water treatment plant was not operational.

The Canadian Red Cross set up emergency shelter at a high school in the area to help those left homeless by the disaster. Prime minister Harper said that the federal government was ready to provide assistance to those affected by the train explosion.

Criminal act

Canadian authorities have found evidence that a criminal act may have led to the train crash, according to provincial police captain, Michel Forget, in a press statement on 10 July.

Canadian police opened a criminal investigation into the train explosion, with about 200 officers scouring the town's devastated centre for clues. "I will not speculate on the evidence that we've recovered, because it's a ▸

Popular US website

advocates fire fighter safety

The popular website, Firefighterclosecalls.com, which advocates safety for fire fighters, is an idea that was birthed from an independent fire fighter newsletter that was created to highlight the issues involving death and injury to fire fighters.

The founders of the website state that often issues are either ignored or quickly forgotten and often not talked about. To this end, an email network of fire fighting personnel in the US, which consisted of a network of friends in fire services, resulted in the formation of the website and news alerts that is received by thousands of fire service members in the US.

The website seeks to gain insight into how other fire fighters have had 'close calls' and have been injured and even killed, so as to be better prepared and aware of the dangers of the profession.

The purpose and intent of the website was created not to 'purposely embarrass anyone' stated the founders of the website, 'but to provide factual information' to the reader on various safety practices to mitigate fire fighter death and injury.

Popular US website, Firefighterclosecalls.com, advocates safety for fire fighters

secret," said police captain Forget. "We don't think the terrorism aspect is a part of that," he added. "Criminal negligence might be one of the leads we are looking at."

Montreal, Maine and Atlantic Railway, the company that operates the freight train, said earlier that the air brakes holding the train in place failed, allowing it to 'barrel downhill' into the small town in Quebec.

Rail World, the parent company of Montreal, Maine and Atlantic Railway executive, Ed Burkhardt, told a Canadian news agency that the brakes were disabled when fire fighters, who put out an earlier fire in an area on the train, shut down the engine powering them. Investigators plan to check the brakes once the crumpled, burned tankers are accessible.

Quebec police officer, Benoit Richard, said that the train rolled into town much faster than a train under an engineer's control would have. "Usually they're traveling between eight kilometres and 16 kilometres an hour." Richard said, "On that night, this train was going at least between 48 kilometres and 64 kilometres an hour."

A huge fireball lights up the sky in Canada after a 70-tanker oil train derails in Lac-Megantic, Canada

The Transportation Safety Board of Canada's team of investigators found the locomotive event recorder, which they can analyse for information on throttle position and speed, among other data.

Fire fighters display their skills
in various fire challenges

Fire fighting teams ready themselves to contest the eight different fire fighting challenges

The Escarpment Ward fire protection association (FPA) that includes the escarpments of Sabine, Pilgrims and Grasp in Mpumalanga Province, South Africa, hosted a fire fighting competition on 17 May this year.

The competition was held for all land owners and was coordinated by a committee consisting of various landowners in the region. The committee decided to award cash prizes to the winning teams, as well as the winners of individual categories in the fire fighting competition.

The group categories consisted of four challenges that was contested by landowners and their respective teams and included challenges for fire tenders with 3 000 litres and up, strike vehicles with 3 000 litres and less, bakkie-sakkies and rake hoeing.

One driver and a crew of seven comprised the fire tender challenge and strike vehicle challenges. The bakkie-sakkie challenge consisted of one crew and one driver and the rake hoeing challenge consisted of one supervisor and a crew of 10 individuals. A total of nine fire trucks, three strike vehicles, seven rake hoeing team and eight bakkie-sakkie crews entered the competition.

The Escarpment Ward FPA and respective landowners in the region were well represented as the competition featured a different winning crew in each of the eight categories. ▸

Fire fighters were judged in a range of tasks that included a best truck driver competition

The rake hoe challenge being contested by one of the fire fighting crews in Komatiland

Various WoF teams participated in the Komatiland fire fighting competition

The fire trucks challenge was won by Komatiland Forests Wilgeboom Plantation 533KLFMP, while the strike vehicles winner represented the Komatiland Forests Tweefontein Plantation 649KLFMP. The bakkie-sakkie challenge was won by Strike Force, which featured another team that won the rake hoeing challenge.

There were four individual awards for best fire truck driver, best rake hoe supervisor, best bakkie-sakkie driver and best fire truck nozzle operator. The best fire truck driver award was handed to York Timber driver, Patrick Masuku. Other individual awards went to Working on Fire (WoF) Wilgeboom's Sydney Gininda for best rake hoe supervisor, while Makhasonke Mpopane won the best bakke-sakkie driver challenge. The best fire truck nozzle operator was won by Johannes Malatje who represented the Komatiland Forests Blyde Plantation.

Escarpment Ward FPA reports that Strike Force and WoF teams worked extremely hard for the winning spot in the rake hoeing competition that started off proceedings. In the strike vehicles and fire truck competition the judges had to keep their eyes open as they sought the best driver of the fire truck division.

The bakkie-sakkies stormed onto the stage ground, to display what is the most important attack of a fire, first attack, highlighted the Escarpment Ward FPA. The FPA stated that it is of utmost importance for the bakkie-sakkie driver to obtain the correct information on where the specific fire is and to drive safely to extinguish the fire while it still in its initial stage of burning. The competition ended on a very positive note as the fire fighters were all geared up and ready for the 2013 fire season, reports the Escarpment ward FPA.

The joint training exercise took place at NSRI Station 18 at Melkbosstrand

SAAF 22 Squadron
and NSRI joint training exercise

By Andy Connell, NSRI Station 29 Air Sea Rescue

Photography by Lee Raath-Brownie

The South African Air Force' (SAAF) 22 Squadron recently had a joint flight training exercise with NSRI Station 29 Air Sea Rescue Unit using its Super Lynx helicopter. The weather on Thursday, 27 June was ideal for both flying, as well as for rough water training.

Super Lynx pilots and flight engineers from SAAF 22 Squadron, based at Air Force Base (AFB) Ysterplaat, had an afternoon training session at Melkbosstrand to cycle pilots and engineers through their hoisting and precision flying procedures. Six pilots and three flight engineers made several sorties to sea to practice delivering the rescue swimmers to a casualty at sea and hoisting them from the water and into the helicopter.

The 22 Squadron, which generally flies the Denel Oryx and Westland Super Lynx helicopters, has been working for over ten years with the rescue team of the NSRI Station 29 Sea Rescue Helicopter Unit, also based at AFB Ysterplaat. These specialised units are collectively building up a strong relationship of trust and performance by closely working together on many exercises and operations off the coast of the Western Cape.

The NSRI Station 18 base situated at Melkbosstrand beach, is often the preferred landing zone (LZ) from which exercise sorties are flown because of its close location to the airbase (fuel saving), it's ideal helipad, rescue boats and safety crew.

The Lynx flight prides itself in punctuality and 164 landed at exactly 14H15, where the rescue swimmers, ground controllers and boat crews were already mustered with the pilots who were to fly in rotation later on.

After the mandatory safety briefing, the exercise program was explained in detail and all role players allocated their respective tasks and times.

As the Super Lynx lifted off with two rescue swimmers aboard, Rescue 18 Alpha, a 4,2-metre Zapcat rescuer sponsored by Men's Health and the Discovery safety patrol rescue runner, Rescue 18 Bravo, were beach launched, taking out rescue swimmers to act as casualties.

The order of the exercise was for each pilot, in rotation, to fly out over the sea and at 15 knots 4,6 metres, the rescue swimmer would jump at the engineer's instruction and swim to the 'casualty in distress'. The flight engineer then guided the pilot with his 'patter', into the hover directly overhead and lowered the hoist head down to the rescue swimmer, with a rescue strop. The rescue swimmer put his/her (yes, we have female rescue swimmers) patient into the strop, clipped themself onto the hoist hook and was then hoisted up to the safety of the cabin.

This evolution requires a high standard of precision flying and a high standard of professional trust and teamwork, each person interdependent on the other.

This was repeated several times with all the pilots and the flight engineers having an opportunity to perform.

There were breaks in between to shut down and debrief as well as for Lynx 164 to skip over to AFB Ysterplaat for a slug-n-glug of Avtur (refuel).

The finale, in failing light, was to test (and recover) the newly designed ▸

Rescue 18 Alpha, a 4,2-metre Zapcat rescuer launching

The newly designed 'Dragon Cross' training apparatus was being tested for the first time

Preflight orientations

Post-flight debriefing

'Dragon Cross' evolution, a bright yellow galvanised and wooden floating cross.

This is a device used to test the pilot- engineer teamwork and skill in using a grapple on the hoist hook to catch the cross and hoist it aboard. The dragon cross is also used on night exercises instead of a live person for safety reasons. The rough, chaotic seas provided the ideal platform to exercise precision flying and teamwork.

No one was injured, no equipment damaged or lost, many lessons learned and all personnel safely recovered back to the rescue base. A testimony to the high degree of teamwork and commitment to safety in a high-risk situation over rough water.

With rough seas, fading light and fuel running low, the Super Lynx finally dipped its nose in a farewell salute and departed for AFB Ysterplaat.

The NSRI crews, tired and salty, remained to wash down the equipment, replenish consumables and tidy the base up to immediate readiness. After a good debrief of the day, everyone headed for home.

Asiana Airlines Boeing 777 crashed onto the San Francisco airport runway in July

San Francisco plane crash

claims two lives and multiple injuries to passengers

South Korean air carrier, Asiana Airlines Boeing 777, crashed onto the runway of the San Francisco International Airport on 6 July, after making its cross-continental journey from Seoul, South Korea.

There were 307 people on board the aircraft, which burst into flames as it landed at the San Francisco International Airport, resulting in the death of two teenage girls and injuries to about 180 people who were sent to local hospitals.

After approaching the airport across San Francisco Bay in California, US, the plane appeared to strike the edge of the approach area of the runway. The tail came off and the aircraft left a trail of debris before coming to rest beside the runway.

San Francisco police and fire officials, described a dramatic scene in the moments after the crash, with fire fighters quickly putting out an initial blaze and clambering up escape slides to help evacuate passengers.

Fire fighters found the Boeing 777 on its belly, with jet fuel leaking from the left wing and passengers streaming down the emergency chutes.

San Francisco Airport Fire Station lieutenant, Christine Emmons, along with other fire fighters, scrambled up inflatable chutes of Asiana Boeing as black smoke billowed out and passengers slid down to escape the wreckage.

Emmons said that her crew joined a 'local police officer' who rescued four injured victims, including one that was trapped close to the back of the plane that had lost its tail as it hit a seawall on the edge of the airport runway.

San Francisco police officer, Jim Cunningham, raced onto the plane without any protective gear, reported a local media agency. Fire fighters said they were shocked to see Cunningham inside the plane helping out, wearing only his police uniform.

Cunningham later described freeing passengers as fire began to engulf the aircraft, saying, "People had injuries and some were just scared to move." He added, "When we were getting the last couple of people out, I started coughing. The cabin started filling up with smoke. A black billow of smoke came rushing towards us before we were just about to get off the plane."

Outside the plane, Cunningham and his partner, officer Derrick Lee, threw knives up to the crew so they could cut passengers out of their seat belts as jet fuel 'gushed out like a fire hose' near him.

Many passengers, especially at the front of the plane, were able to walk off easily. Emergency workers and passengers, however, described a grim situation in certain parts of the plane, where some passengers were trapped among dislodged seats and an escape chute that had deployed inside the aircraft.

Ultimately, everyone the first responders found aboard the plane was helped to safety. "I feel very lucky and blessed we were able to get those people out," Emmons said.

San Francisco General Hospital spokesperson, Rachael Kagan, said that there 15 people being treated at the hospital – 10 of whom were in critical condition with burns, fractures and internal injuries.

The two girls that died in the incident were among a group of about 35 students on their way to attend a summer camp at the West Valley Christian School in West Hills, near Los Angeles.

Possible cause of plane crash

One survivor said the pilot seemed to be trying to gain height just before the aircraft struck the runway. The four pilots from the flight ▶

Mother Nature is a variable that advancements in fire technology cannot overcome

Fire fighting technology advances but cannot overcome one variable

While fire fighting technology improves, there is one variable that the advancements in fire technology have not been able to overcome – Mother Nature, according to US fire technology experts.

The deaths of 19 fire fighters battling a wind-whipped blaze in central Arizona is one incident that has many people questioning the tactics used for fighting wildfires and whether these methods are more effective that fire fighting efforts in decades past.

Experts note the technology and equipment for fighting wildfires and forest fires have improved considerably over the years. Advancements include huge DC-10 retardant-dropping tankers, state-of-the-art helicopters, GPS mapping capability and infrared night time flyovers.

However, there are still only two major ways to fight a wildfire on the ground. That is directly with bulldozers, engines and hand crews at the front lines and indirectly, by building a line some distance away to rob the blaze of its fuel supply, noted US wildfire investigator and deputy fire chief for Lake Dillon Fire-Rescue in Colorado, Jeff Berino.

Berino told a US media network that technology was much better in this era of fire fighting than what it had been in the 1970s and 1980s when he began his fire fighting career. "The techniques we are currently using are sound and have been proven over the years, but the variable is Mother Nature," said Berino.

Mother Nature

Years of drought and record heat have created tinder-dry conditions across much of the West, creating what fire officials described as a 'perfect storm' for the wildfire disaster that took place in Arizona, where 19 fire fighters were killed on duty in June this year.

Speaking to a local television news agency in Arizona, US Forest Service fire information officer, Jim Paxon, said that the area that burned was populated with manzanita, a type of evergreen bush or tree that contains 'a lot of oil'. "Especially when it's dry, it looks like an oilfield fire when it burns," said Paxon.

The men followed safety protocols, but it appears that the fire's erratic nature, driven by powerful wind gusts, simply overwhelmed them, stated fire incident coordination group, Southwest Area, incident team leader Clay Templin, according to The Associated Press.

Paxon said nature was in control when the winds whipped up. "It appears to me that things happened so rapidly, the changes were so violent, that the crew did not have time to react."

Deputy fire chief, Berino, said in recent years wildfires have increased in ferocity and current fire fighting techniques are no match for it. "I'm seeing fire behaviour that I've never seen before," he said.

"The fires we're seeing are just building up with intensity with an incredible amount of fuel in woods and a lot more homes. It's a different ballgame," said Berino.

▸were interviewed by the National Transportation and Safety Board (NTSB) team of investigators into the incident, reported a San Francisco media agency.

It was discovered that the pilot at the control, Lee Kang-kuk, was still training on the Boeing 777 aircraft and was making his first flight as a trainer. Lee had 43 hours of experience flying the long-range jet, said Asiana Airlines.

Lee Kang-kuk was making his first attempt to land a 777 at San Francisco's airport, although he had flown there 29 times previously on other types of aircraft, said South Korean Transport Ministry official, Choi Seung-youn.

Asiana Airlines president and CEO, Yoon Young-doo, in a news conference at the company's headquarters said, "All responsibilities lie with the instructor captain."

NTSB chairperson, Deborah Hersman, said at a news conference in San Francisco that the Asiana Airlines Boeing 777 was flying at around 60 kilometres per hour, below its target speed of 257 kilometres per hour in the moments, before it crashed at the San Francisco International Airport, bringing the role of the pilots of the flight under scrutiny.

Planes can stall at slow speeds, and Hersman said that a stall warning had sounded four seconds before the crash. Hersman, whose agency takes the lead in finding the cause of US air crashes, said however, that it was too early to conclude pilot error.

EMS workers under siege in Cape Town

Western Cape EMS workers were being targeted by criminals when responding to emergency calls

Emergency Medical Services (EMS) paramedics in the City of Cape Town, South Africa have been under siege in the past few months from the local community, according to reports from the Western Cape Health Department EMS.

In Mitchells Plain township in the Western Cape, emergency workers suffered three different attacks by criminals over a fortnight. They were held at gunpoint in two separate incidences and in another incident had a cardiac monitor stolen from an ambulance.

Western Cape Health Department EMS spokesperson, Angelique Jordaan, said that the incidents in Mitchells Plain were among 10 incidents in the region this year, where EMS workers responded to emergency calls and ended up being targeted by criminals.

The provincial health department stated that it was 'very concerned' about the safety of its workers after they were increasingly falling victim to crime while on duty. The first of the three incidences in Mitchells Plain took place on 13 June when an EMS team was held at gunpoint on the border of Eastridge and Tafelsig, however, nothing was stolen from them on this occasion.

On 18 June, a cardiac monitor worth R35000 was stolen from an ambulance while staff were tending to a patient on the border of Crossroads and Eastridge. On 26 June, an EMS team was held at gunpoint and robbed of all their belongings on AZ Berman Drive in Mitchells Plain.

Jordaan said hot spots had been identified, which included Khayelitsha Site B township and areas in the northern and southern suburbs where gang violence and activities were prevalent.

"Unfortunately certain incidents occur randomly and it is a case of the ambulance crew being in the wrong place at the wrong time with no forewarning," she said.

Jordaan said staff had been informed that their personal safety was a primary concern and if they felt unsafe, they could leave an area.

"As a department we are very concerned and the vigilance and alertness of the crews are the only mechanisms currently in place for their own protection," stated Jordaan.

"The nature of their work is dangerous and the thought of them being attacked by the very people they serve is frightening and demoralising. We can only appeal to the communities out there to protect and respect our staff."

Leading industrial exhibition to relaunch under new name

Commercial security, homeland security, fire and safety exhibition, IFSEC West Africa, announced that it is set to relaunch under the Securex West Africa brand in 2014.

IFSEC West Africa and IFSEC South Africa have historically been run by global live media and business-to-business (B2B) communications, marketing service and data provider, UBM Montgomery, which is a joint venture between the two events and exhibitions companies, UBM Live and Montgomery, created to run security exhibitions in the Africa sub-Saharan region.

After a strategic review, both parties have agreed to continue the joint venture in South Africa and concentrate on the IFSEC brand in that region. However, IFSEC West Africa will become Securex and will be run exclusively by Montgomery outside of the joint venture.

IFSEC West Africa, which has just completed its third highly successful event at the EKO EXPO Centre in Nigeria, was launched in 2011 by UBM Montgomery West Africa.

UBM portfolio director, Simon Mills, commented, "After three successful years of jointly running IFSEC West Africa we have decided to focus our attention on the faster growing IFSEC South Africa event with Montgomery, as well as focusing on our own wider global portfolio of IFSEC events including India, Saudi Arabia and the new launches in Turkey and Malaysia".

Securex West Africa will run from 4 to 5 March 2014 at the EKO EXPO Centre in Lagos, Nigeria.

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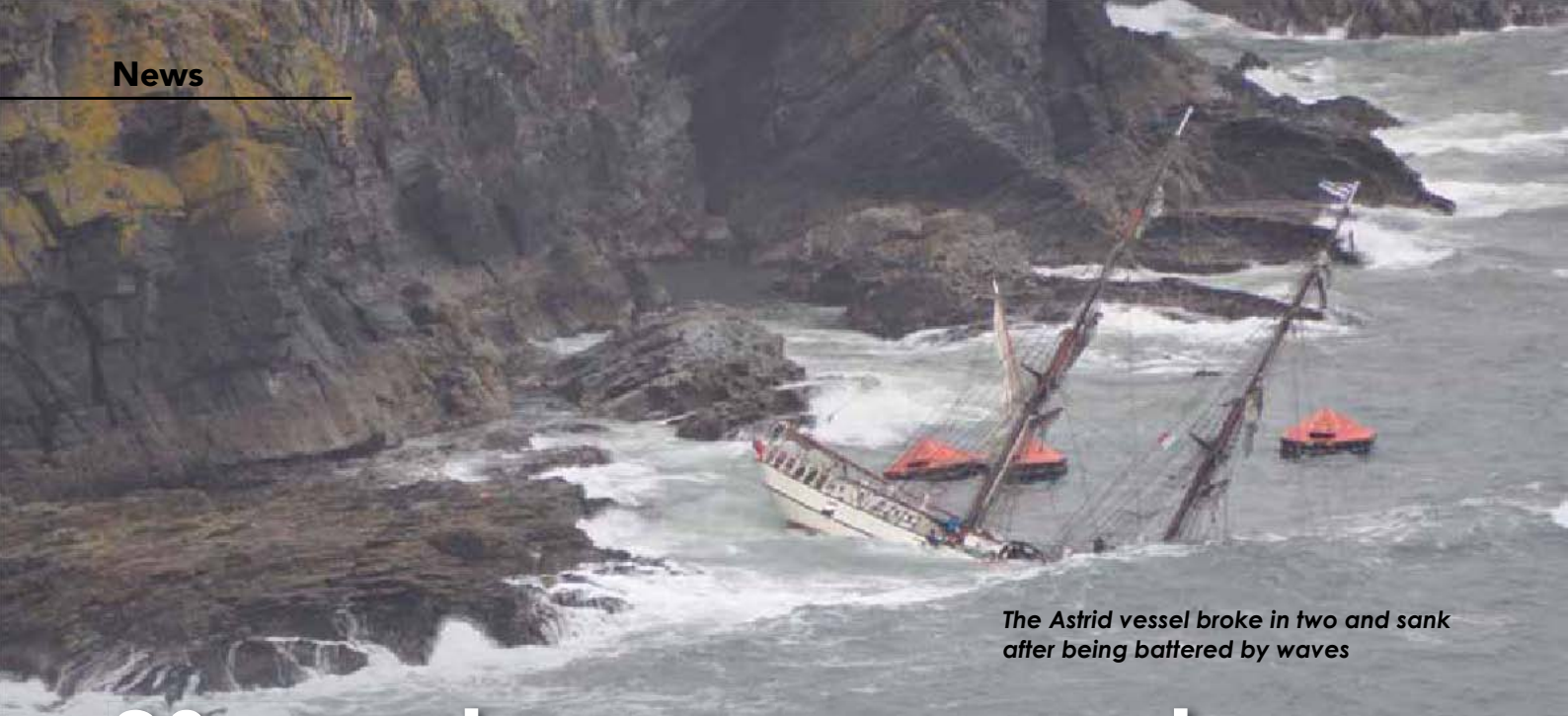

The Astrid vessel broke in two and sank after being battered by waves

30-member crew rescued as ship sinks in Ireland

Thirty people had to be rescued from a sailing vessel that ran aground in Ireland on 24 July this year.

A major rescue operation was undertaken after the tall ship hit rocks off the Sovereign Island near Kinsale, Cork Country in Ireland, as it attempted to navigate its way into the harbour of the near tourist town.

The 42-metre long sailing vessel, Astrid, was en route to take part in a tall-ship regatta when it suffered engine failure. The disabled vessel signalled the other nearby vessels that it was in trouble. The ship continued to drift toward shore until it crashed onto rocks off the Sovereign Islands.

Weather conditions said to be poor when the captain of the Astrid signalled that he had a problem, according to media reports. The waves pounded the Astrid on the rocks until it broke in two and sank. The crew on board the vessel were said to be seven adults and 23 teenagers.

The captain of the Astrid ship requested assistance and several lifeboats and two helicopters responded to the scene. A lifeboat carried 18 crew members to safety and the remaining 12 were reportedly ferried to a second tall ship sailing the vicinity. The two Irish Coast Guard rescue helicopters based at Shannon and Waterford were dispatched.

There were no reports of any injures. The crew was treated for hypothermia and shock, according to reports.

The Astrid, a Dutch vessel, was among several boats taking part in The Gathering Cruise event in Kinsale and would take part in the Glandore Classic Boat regatta.

Electronic mobile game
gets too hot for smartphone

The home of a Hong Kong man was destroyed after his smartphone caught fire while he was caught up playing a game called Love Machine.

The 47-year old man, surnamed Du, took to his sofa after dinner to play the game on his smartphone, which he connected to the charger so that he could play the game.

The smartphone allegedly exploded while Du was engrossed in the Love Machine. Du said that he apparently heard a loud noise and dropped the phone on his sofa, which was made of highly flammable material. The flames spread throughout the house and even threatened to burn Du's car parked in the driveway outside.

A report by the fire department stated that there were 'no suspicious circumstances', but whether the true cause of an entire house burning was actually the smartphone 'remains to be seen'.

The home of a Hong Kong resident allegedly caught fire after his smartphone exploded

The incident has been met with amusement by some on the web, who say that perhaps the manufacturer should consider adding fire detection software.

First class training offered

at Australian airport training ground

Airservices Australia, a government-owned corporation providing services to the aviation industry, cconducted the first of a series of aviation rescue and fire fighting training at its new 'hot fire' training ground at the Melbourne Airport on 17 April 2013.

The Learning Academy Hot Fire Training Ground (LAHFTG) at the Melbourne Airport is the only one of its kind in the southern hemisphere and will see new recruits train on the centrepiece of the new training ground, which is a full-sized mock-up aircraft fuselage replicating sections from the Airbus A380 and Boeing 767 aircrafts.

Airservices spokesperson, Rob Walker, said the new facility set stringent environmental control systems in place. This was done in order to mitigate the impact of the training activity on the surrounding environment and reduce the amount of smoke. "Melbourne Airport users and the public should not be concerned if they do see smoke during the training," said Walker. "Our fire fighters are there to protect the public in the unlikely event things go wrong at major airports. They respond to a host of different incidents every day ranging from medical emergencies to fire alarms and aircraft emergencies," commented Walker.

The training involved 24 trainee fire fighters being put through a series of scenarios to hone their skills in the specialist field of aviation fire fighting and rescue procedures. Airservices will be able to deliver practical components of a nationally recognised and accredited qualification, through the training, whilst ensuring that its fire fighters are able to deal with the latest and most complex airframes, reports the company.

On average, Airservices' fire fighters are called out around 150 times a week across Australia's regional, domestic and international airports. Airservices provides aircraft rescue and fire fighting (ARFF) services at 21 of Australia's busiest airports and is one of the world's largest providers of aviation rescue and fire fighting services with more than 740 operational and support personnel.

Meanwhile, Airservices announced that it was recruiting personnel for its national elite ARFF service in a few Australia territories, including Brisbane and Perth. Airservices executive general manager ARFF, Michelle Bennetts, said that the

Aviation fire fighters in training

service responds to a diverse range of incidents ranging from medical emergencies, to aircraft and airport building fires. "Anyone with the required level of fitness and a commitment to ongoing skills development and training can pursue a career as an aviation fire fighter, no matter what their background," she said.

Successful applicants undertake a rigorous 11-week recruit course in Melbourne, receiving a nationally recognised qualification, through the Airservices Learning Academy. On completion of their initial training, graduates are awarded a Certificate II in Public Safety Fire Fighting and Emergency Operations. They will then join more than 740 fire fighters based at 21 of Australia's airports.

Fire training empowers Ghana farmers

The Yendi Municipality of Ghana's Northern Region facilitated the training of 125 fire volunteers by the Ghana National Fire Service in June this year.

The 125 volunteers, primarily made up of local farms that underwent the fire training were drawn from various villages within Ghana's Yendi Municipality, stated the Evangelical Presbyterian Development and Relief Agency station manager, Joshua Nyaaba.

The fire fighting volunteers were taken through causes of bush fire burning, effect of bush fires, prevention and control of bush burning and ways and tools for fighting bush fires, reported Ghanaian online news portal, Ghanaweb.

The Yendi Municipality deputy coordinating director, Jimah Yakubu, commended the Evangelical Presbyterian Development and Relief Agency (EPDRA), Association of Church Development Project (ACDED), Canadian Hunger Foundation (CHF), the GNFS and their collaborators in intensifying the training of fire fighting volunteers.

Yakubu called on traditional authorities, assembly members and stakeholders to contribute towards eradication of bush fires, felling of trees indiscriminately and encourage their communities to plant more trees.

The Yendi Municipal Assembly would continue to support the training of fire volunteers in the Municipality to eliminate burning of the bush in the Municipality, stated Yakubu.

Ghana instituted a revised version of fire laws recently that empowers district assemblies to form bush fire controlled sub-committees.

Five Oshkosh striker vehicles added to UK airport fleet

Oshkosh Striker vehicles at the Birmingham Airport's fire training ground

Oshkosh Airport Products Group, a division of New York Stock Exchange listed, Oshkosh Corporation, announced that five Oshkosh Striker aircraft rescue and fire fighting (ARFF) vehicles have been placed into service at Birmingham Airport in Birmingham, England.

The five state-of-the-art vehicles will provide the airport's emergency responders with greater fire suppression and enhanced safety technologies. The airport has invested more than five million US dollars in Oshkosh Striker vehicles to replace its current fleet.

"We are honoured to be chosen by the team at Birmingham Airport for this purchase of five Oshkosh Strikers. As our first UK airport contract, this represents an important milestone," said Oshkosh vice president and general manager for airport products, Jeff Resch. "The Birmingham team has an excellent vision for the airport's future success and we're delighted to equip its fire and rescue department with Oshkosh Striker ARFF vehicles to provide unmatched emergency response capabilities."

Birmingham Airport operations director, David Winstanley, said, "We are delighted with the Striker vehicles and are grateful to Oshkosh for supplying these fantastic apparatus to help us provide world class fire and rescue services for our business and partners." Winstanley added, "In committing to this investment, we are securing the long-term efficiency of our fleet to improve reliability and performance and to ensure our fire fighting capabilities are commensurate with future aircraft size and configuration requirements."

The Oshkosh Striker features advanced safety systems and delivers innovative fire suppression technology, chassis performance and reliability and durability.

The 6x6 axle configuration, featuring the Oshkosh TAK-4 all-wheel independent suspension and Oshkosh rear steering system, offers a smooth ride and excellent off-road capabilities. The 700 horsepower, Tier-four i/Euro five emissions-compliant turbocharged engine is mated to a seven-speed electronic automatic transmission for smooth power delivery and a top speed greater than 113 kilometres per hour. The engine power pack components are readily accessed through walk-in doors on either side of the engine compartment for easier servicing.

Three of the five Birmingham Striker vehicles are equipped with snozzle high-reach extendable turrets. The snozzle can penetrate an aircraft fuselage in the event of an aircraft incident, allowing direct and close range access to an onboard fire. In addition, the vehicles are equipped with hydrochem nozzles that can discharge water and dry powder simultaneously. Other features include vehicle data recorders to catalogue the driver's actions when responding to an emergency, as well as forward-looking infrared (FLIR) cameras.

Birmingham Airport is located near the city of Birmingham, in the West Midlands region of England. In 2012, Birmingham Airport served close to nine-million passengers, making it the seventh busiest UK airport. The airport offers both domestic as well as international destinations in Europe, the Middle East, Pakistan, North America and the Caribbean.

TOUGHEST

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FIRE
RESCUE

People jump from building engulfed in flames in Pakistan

A fire at a business plaza in Lahore, the capital city of Pakistani province of Punjab, erupted, killing eight people. The fire erupted at the LDA plaza during midday on the seventh and eighth floors and then rapidly engulfing three more floors in flames in May this year.

The upper floors of the LDA plaza engulfed in flames

One man died at the scene after falling from the seventh floor of the 13-storey building in an attempt to escape the fire. Two other occupants of the building, who jumped out of the complex to escape the smoke and fire, were taken to hospital. They would they later succumbed to their injuries. Dozens more sustained serious burns and other fire-related injuries after it erupted as scores of people found themselves trapped inside the high-rise building.

Rescue work was immediately underway at the site of the fire as five fire trucks were used to extinguish the fire. Many people remained trapped in the building during the incident and signalled for rescue from windows in the upper floors.

Cars parked close to emergency exits and entrances to the building created difficulties in the rescue operation at the plaza and there was an apparent lack of machinery for the operation according to Rescue 112 workers. The rescue teams and fire brigade units battled the blaze all day and night as the fire spread to other floors of the building. Helicopters were used in the rescue operation to evacuate people from the building. According to media reports, the LDA plaza did not have any fire exits. The injured persons were taken to Ganga Ram, Services and Mayo Hospitals as multiple people suffered serious burn wounds and other injuries, reported local media.

Meanwhile Pakistani president, Asif Zardari, expressed his shock and grief over the loss of life at the LDA Plaza, calling for an inquiry into the unfortunate incident.

Angel flight plane crashes in Ephrata, NY

A plane transporting a medical patient back home in New York after receiving brain cancer treatment in Boston, Massachusetts, crashed in the town of Ephratah, killing all three people on board the plane in May this year.

The plane's pilot, John Campbell and passengers, Frank Amerosa and his wife Evelyn, had been on board an Angel Flight, which is a non-profit organisation that sets up free air transportation and medical care for people who cannot afford a commercial flight.

The plane went down on the evening of 24 May in the town of Ephratah, where local residents witnessed the plane circling above, followed by a loud explosion, reported local news outlets.

Fulton County Sheriff, Thomas Lorey, said after the accident, "There's a very wide debris field that covers a great wide amount of area. So, obviously we are going to need some time and it will be an effort put in until we find everybody."

The bodies of all three people onboard the plane were recovered after a week-long search by rescue workers, which included 100 volunteers who canvassed the town and nearby woods. Wreckage from the crash was dispersed over a large area, with pieces of the plane found as far as eight kilometres away, according to National Transportation Safety Board (NTSB) spokesperson, Eric Weiss.

The NTSB said that the plane did not issue a distress call before losing radar and radio contact. The Federal Aviation Administration (FAA) and the NTSB were investigating what might have caused the crash. Visibility at the time in Rome was 16 kilometres, according to National Weather Service meteorologist, Brian Montgomery.

Angel Flight has provided free air transportation and medical care for more than 65 000 children and adults on about 60 000 flights covering more than 19,2-million kilometres since it was founded in 1996.

US Air Force
fire fighting aircraft repositioned

A C-130 airlift wing outfitted with a modular airborne fire fighting system

The US Forest Service, through the US National Interagency Fire Centre, directed the repositioning of military modular airborne fire fighting system (MAFFS) aircraft from Colorado Springs, Colorado to Mesa, Arizona in July.

MAFFS is a self-contained aerial fire fighting system owned by the US Forest Service, which is loaded into the cargo bays of military C-130 aircraft. The MAFFS aircraft were initially activated on 11 June this year, to assist in fighting forest fires in Southern Colorado after US Forest Service officials sent a request for assistance to the Department of Defense though the US Northern Command.

The four MAFFS aircraft operated by the US Air Force is designed to assist ground fire fighting crews by dispersing fire retardant agents that help to mitigate and slow active fires, reports the US Air Force.

Since activating the MAFFS aircraft, a total of 70 drops have been made in Colorado and Arizona fires using some 719 000 litres of fire retardant.

The US Air Force provisional, Air Expeditionary Group commander for wildland fire fighting, Colonel Charles D. Davis, said that the weather and ground operations assisted in the successful relocation of the MAFFS airplanes and their crews to Arizona.

Davis said that the US Forest Service will determine if it is necessary to assist in the deploy of fire fighting aircraft in Arizona. The US Air Force reported that four additional MAFFS-capable C-130 aircraft are operated by Air National Guard units in North Carolina and Wyoming and can be called on if needed.

Following US Forest Service lead planes, military aircrews can discharge about 11 000 litres of water or fire retardant from the MAFFS modules along the leading edge of a forest fire in less than five seconds and cover an area 400 metres long by 30 metres wide. Once the load is discharged, ground crews at a MAFFS tanker base can refill the modules in less than 12 minutes.

MAFFS is a joint Department of Defense and US Forest Service program, providing aerial fire fighting resources when commercial and private air tankers are no longer able to meet the needs of the US Forest Service.

Bush fire threatens
southern Australian township

About 250 fire fighters battled to contain a bush fire in Adelaide Hills

A bush fire that threatened to run through the township of Cherryville in the Adelaide Hills in Southern Australia in May this year, was contained by local fire fighters.

Southern Australia's Country Fire Services (CFS), released a public statement stating that 'a bushfire at Cherryville in the Adelaide Hills may threaten your safety', on 10 May this year.

"The uncontrolled fire is burning in scrub (terrain) and conditions are continually changing. Check and follow your bushfire survival plan. If your plan is to leave or you are not prepared, leave now", said the warning message from the CFS.

SA Power Networks, the electricity distribution network for southern Australia, reported that 200 customers were without power in the Cherryville area as a result of the bush fire.

The blaze had been out of control and destroyed one home and burnt hundreds of hectares in difficult terrain. The CFS warned residents, however, to stay vigilant as some of the areas remained unsafe. The fire continued to burn in inaccessible terrain with fire fighters and water bombers working to secure certain volatile areas of the fire.

Fire fighters, with the assistance of water bombers, were able to contain the bush fire after two days of battling the blaze, reported Adelaide's fire officials. A Bureau of Meteorology spokesperson said that forecast rains would keep the fires under control.

CFS regional officer, Brenton Hastie, said improved weather conditions helped the fire crews battling the Adelaide Hills bush fire.

FBI loses elite hostage rescue agents in helicopter accident

Two members of the US Federal Bureau of Investigation's (FBIs) Hostage Rescue Team, a paramilitary counterterrorism unit, were involved in a fatal helicopter accident while involved in a training session in May this year.

The FBI stated that the pair had been rappelling from a helicopter onto a ship when the aircraft encountered unspecified difficulties. The agents 'tragically fell a significant distance', reported the FBI.

The Hostage Rescue Team take part in intense preparation for fast deployment to within four hours of an emergency on US soil. They are expert marksmen and train to scuba dive and parachute.

The two men, both from the state of Virginia, US, were among the elite of the elite in the Hostage Rescue Team, which travels the globe in response to fast-developing criminal threats.

The often secretive nature of the agents' work was reflected in a comforting service for friends and family after the accident, when scant details about their work and home lives were released.

A section of the Altaf Manzil building in Mumbai collapsed, killing 10 residents

Building collapse
fuels construction quality concerns in India

An apartment block collapsed in Mumbai, India, caused the death of 10 people fuelling concerns about construction quality in the region on 10 June this year.

Rescue workers and local police concluded nearly two days of search and rescue operations, using hand-held wire cutters and excavators to search through the rubble for survivors, many of whom were asleep at the time of the building collapse.

Another part of the building structure caved in soon after the initial collapse of a section of the five-storey Altaf Manzil building, causing added complications to rescue efforts.

"There have been 10 deaths; five adults and five children," confirmed Mumbai's Thane district police commissioner, KP Raghuvanshi.

Police searched for survivors at the site, located near a famous Muslim shrine, for nearly 30 hours after the incident amid heavy monsoon rains. Rescue operations had been called off as there was little possibility of more people being trapped under the rubble, reported Mumbai officials. The building collapses have highlighted widespread sub-standard construction standards in India, where huge demand for housing and pervasive corruption often resulting in cost-cutting and a lack of safety inspections.

Police said investigation was under way into the cause of what was the third building collapse in recent months in the Mumbai area, including one in April that killed 74 people. Two builders and seven others were arrested in connection with that tragedy.

Fewer than 300 agents have been selected to the Hostage Rescue Team since it was formed 30 years ago. Joining the Hostage Rescue Team requires years of service and brutal training during which agents shed their identities to ensure each is judged equally. On the first day, applicants are awakened before dawn to climb stars wearing 25 kg vests and carrying 16 kg battering rams.

The unit not only rescues hostages, but also respond to terrorist threats and large-scale manhunts in extreme weather and habitat.

The Hostage Rescue Team was created in 1983 prior to the Summer Olympic Games in Los Angeles, US in 1984 after fears of repeat terrorist attacks that took place in the 1972 Games in Munich, Germany, when Palestinians took 11 Israel athletes and killed them.

In 2011, the FBI team helped other special operations forces kill four sea pirates, one in close combat with a knife, who had commandeered a yacht off the coast of Somalia and killed the four Americans aboard, according to the FBI's website. A member of the Hostage Rescue Team had been deployed from Nairobi. In February, the hostage team killed a truck driver who had taken a five year old boy hostage in an underground bunker in Alabama for a week. The boy was pulled out unharmed as agents exchanged fire with his captor.

The FBI Agents Association, which is a professional group of nearly 12 000 retired and active agents released a statement about the helicopter accident, saying that the bravery and dedication of the special agents that lost the lives in the training accident will not be forgotten.

OHS regulation
creates new opportunities for EMC training academy

Emergency medical services training academy, human emergency life programme (HELP), based in Edenvale, Gauteng, South Africa is currently involved in various OHS training courses for corporate clients that seek to fulfil the requirements of the Department of Labour's for safety in day-to-day operations.

Hendrik Coetzee

HELP emergency medical training deputy principle, Hendrik Coetzee, says that the academy is not only focused on individual people, but help companies meet basic health and safety requirements. "This makes us different from other institutions, since we offer mobile training to cater for corporate clients."

Coetzee mentions that in the last five years there has been an increasing focus from the corporate sector to train employees in basic first aid and fire risk and prevention. He says, "Government is focusing on OHS mandates and is taking measures to ensure that it is being implemented."

HELP principle educator, Damian Taylor, says that site inspection and assessment also forms part of the service provided by HELP for both corporate and health institutions, including hospitals. Taylor mentions that the corporate training projects undertaken by HELP educators has mostly been in the agricultural industry, although the academy has most recently provided OHS training for a mining client.

HELP offers a diversified training programme covering the full scope of the corporate environment to assist clients in fully complying with OHS legislation. Coetzee says that operational staff and management in the corporate sector take part in the assessment and training provided by HELP

The Johannesburg Development Agency (JDA), a project by the City of Johannesburg that seeks to stimulate and support area-based economic development, has been one of the corporates that recently approached HELP to provide basic first and fire fighting risk assessments after an emergency incident at its offices, reports Taylor. "The JDA decided that it wanted to about labour requirements of the Department of Labour and we were in charge of the project," he says. "They felt inadequate in OHS and felt that everyone needed to know how to save a life."

Taylor mentions that JDA management and normal staff were sent on basic cardiopulmonary resuscitation (CPR) training, which took the academy 'a good three months to go through all of their staff'.

Growth spurt

HELP first started out providing basic ambulance and first aid training for many years until 2001, when under new leadership Taylor, it grew to offer various emergency medical care (EMC) courses including, occupational health and safety (OHS) and immediate life support (ILS).

HELP also offers advanced cardiac life support courses, which is typically attended by post graduate medical students. "We offer paramedic, OHS, basic fire fighting all the way up to post graduate life support courses," explains Taylor. All the courses offered by the academy are accredited with the American Health Association, International Trauma Life Support Association and the Resuscitation Council of Southern Africa, the latter of which Taylor currently serves as vice chairperson.

The academy offers a range of intermediate and post graduate courses that vary in length from the full-time ambulance emergency assistant course that takes four

HELP medical directors head up various advanced EMC courses offered by the academy

months to complete to the the international trauma life support course (ITLS), which is an intensive three-day course.

The HELP emergency medical training academy draws on the skills of alumni and other medical professionals to instruct students on the various EMC courses providing by the academy. The principle and vice principle are assisted by course coordinators who provide guidance for the various course instructors.

The academy has its own doctor working as a course coordinator and maintains the standard of the programmes, states Taylor. A medical director heads up each of the advance medical courses offered by the academy, which includes the advanced cardiovascular life support (ACLS) and paediatric advanced life support (PALS) courses.▲

Western Cape
incident command summit

The Western Cape Government Disaster Management and Fire Brigade Services in South Africa hosted an incident command summit with the overall objective of coordinating incident management in the Province.

The main view point is that an incident command system and the sharing of resources, supported by well-trained staff with clearly defined roles and responsibilities within their statuary parameters, are key to the effective mitigation of large-scale incidents. An incident command system (ICS) can therefore not exist in isolation and must form part of a united framework.

With this in mind, the Western Cape Government Disaster Management and Fire Brigade Services invited all role players and agencies to participate in an objective discussion round the managing of incidents in the Province.

Ian Schnetler, chief fire officer, City of Cape Town Fire and Rescue Service, facilitated the programme.

Ian Schnetler

Schalk Carstens, director risk reduction, Western Cape Government Disaster Management, reviewed the major incidents in the Cape since 2000 and said that, referring to the provincial and national report, that a generic incident command system should be in place in order for a coordinated multi-agency response to be effective.

Schalk Carstens

Reynard Geldenhuys

"There is no problem in individual line functions, but when we, on a local, provincial and national level work together, there are problems due to the differences in terminology and radio frequency, to name but a few", Carstens commented. He also mentioned a documented plan that was effectively used for the 2010 soccer world cup, but then shelved. Carstens furthermore said that Colin Deiner, chief director, Disaster Management and Fire Brigade Services, Western Cape Government and Jurgens Dyssel, manager: fire services coordination, Department of Cooperative Governance, was appointed to formulate a singular incident command system on a national level.

Reynard Geldenhuys, chief fire officer, Overberg District Fire and Rescue Service, presented an overview of the incident command system used by the service. Geldenhuys explained that an ICS is the model tool for command, control and coordination of incidents and outlined various problems that can occur during incidents ie reactive, defensive, plans not always communicated clearly, control over resources and logistics. "As fire chiefs, the more lights, engines and planes the people see, the more they think we are in control", said Geldenhuys. "An ICS is a management system, not just an organogram", he explained. Geldenhuys also detailed the history of the incident command system, which originated in the mid-1970s in Southern California and was incorporated in the National Incident Management System (NIMS) of the National Fire Protection Association (NFPA) of the United States' Standard 1561. He detailed the organisational components of an ICS and said that the incident commander is the first arriving responder and, if he does not appoint an ICS commander, will be accountable for all ICS responsibilities. Geldenhuys also discussed expanding incidents and the importance of flexibility and standardisation. He detailed an ICS toolbox and discussed modular organisation and incident types ie five levels of complexity:

- Type 1 – National
- Type 2 – Provincial
- Type 3 – District municipalities
- Type 4 – Municipalities
- Type 5 – Local

Geldenhuys furthermore suggested that the current two groups ie fire chiefs committee and the forest and veld fire committee should form a unified incident command group.

The legal and constitutional framework of incident command (IC) in South Africa was discussed by Jurgens Dyssel, manager: fire services coordination, Department of Cooperative Governance. Dyssel overviewed the legal aspects of IC and said, "There's nothing in the law that says there has to be an incident ▸

Jurgens Dyssel

Lisa Geswindt

command system". He continued, "The Achilles Heel about an ICS is that one agency will think another agency will tell them what to do. The word 'command' in itself could cause a problem". Dyssel, through the use of a cartoon, lightened the subject and said, "Run from it, is NOT an emergency plan." He explained the legal aspects including the Constitution of South Africa, Supreme Law, Defence Force, disaster management, emergency management services, fire services, South African Police Service and municipal public services. "A lot of people think that policy influences law. However, the law influences policy," said Dyssel and mentioned the National Disaster Management Framework. "You can't implement an ICS if you didn't plan for it." Dyssel, in closure, said that the late Pat Reid's Masters Paper holds an enormous amount of information and should be considered in the system.

Comments

Comments included, "It is very difficult for a fire chief to hand over his command to someone else as you are responsible for your own patch and your head will roll if not managed properly," Ian Schnetler; "The Disaster Management Act overrules all, even a national joint operations centre (NATJOC), except in war and major crimes," Schalk Carstens; "It's no longer about who needs to do what, but about doing your job," Jurgens Dyssel; "Every fire protection association (FPA) needs a healthy relationship with its local fire chief," Ian Schnetler.

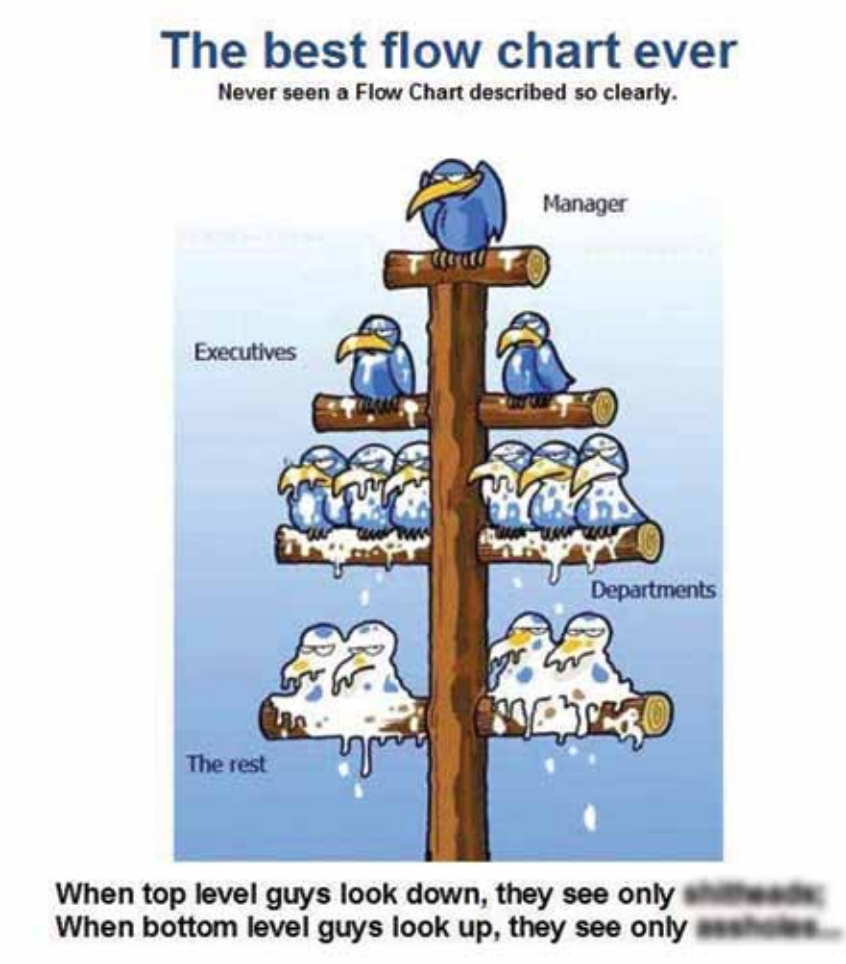
Rodney Eksteen and Lisa Geswindt, Western Cape Disaster Management, discussed the role of public information in ICS. Geswindt detailed the media policy for the Western Cape Fire Services and partners and explained why such a policy is an important tool of ICS. She also detailed crisis communications and best practices. Geswindt emphasised the importance of preparation by developing a media policy, building relationships and anticipating crises'.

Rodney Eksteen

Eksteen thanked Cape Nature who had already developed a policy for dealing with the media. He detailed the function of a public information officer (PIO) and explained the importance of on-scene media management. Eksteen also highlighted the value of a three-prong strategic public information programme, which includes life safety strategy, integrated media strategy and public information, education and relations (PIER) strategy. "The synergy of the three together far outweighs the singular message", said Eksteen. "It is not only about putting the wet stuff, on the red stuff." He also discussed the training of a public information officer (PIO) and a media-ready PIO on-scene note sheet designed for an all-hazard approach based on specific outcome objectives. Eksteen elaborated on the public education message and how the media would pick up certain issues and do articles on it afterwards. "This is a very effective way of getting correct information and a message out to the public at no cost to the department", stated Eksteen. He also said that services should see the media as an ally and not as an opposition. "A media pack sent to the politicians to use for information when dealing with the media, can also become a very powerful tool. You must have a positive relationship with the media," concluded Eksteen.

Fred Favard

Fred Favard, FFA Training, presented the role out, accreditation and future of ICS in South Africa. Favard explained the history behind setting up an ICS working team in South Africa. Favard described the purpose of the working team and the veld and forest fire qualification system guide. He detailed the position task book and described the position categories recognised by the ICS working team. Favard furthermore discussed the approved qualifications and said that the University of the North West was accredited to offer these qualifications. He also mentioned that FFA Training is now offering these courses through a memorandum of understanding (MOU) with the University. Favard explained that it was South African Qualifications Authority (SAQA) approved by the Fibre Processing and Manufacturing Sector Education and Training Authority (FP&M SETA) and that the courses encompassed position-specific training including incident management team training for team development and simulations.



The best flow chart ever (edited) as presented by Fred Favard

Dr Wayne Smith, Metro Emergency Management Services, Western Cape Department of Health, discussed the medical incident management system (MIMS) in the Western Cape. Dr Smith gave a brief history of MIMS, explained who is using it and said that the medical fraternity does not use the word disaster', but rather call it a 'major incident'. He discussed the frequency data, which has not been measured in South Africa, and the classifications. He also explained the differences between a compensated and an uncompensated incident and said that MIMS, by incorporating CSCATT, created a paradigm shift for the medical fraternity. CSCATT:

- Command and control
- Safety
- Communication
- Assessment
- Triage
- Treatment
- Transport

Dr Wayne Smith

Dr Smith explained the different terminology used by the medical fraternity ie bronze, silver and gold areas and also how the scene command differs ie the outer and inner cordons. He explained the tiers of command used in a major medical incident ie bronze which is operational; silver which is tactical and gold which is strategic. He detailed the responsibilities of each sector commander and said that communication is the most important link in major incident management. "Causes of poor communication include lack of information, lack of confirmation and lack of coordination. This is a result of poor discipline and poor liaison", he stated. "We need to respect each other's responsibilities. The patient doesn't care if it's a red truck, a yellow truck or a blue truck."

Ian Schnetler commented that "the fundamental principles of the systems are the same but that we have to respect each other's disciplines and expertise." Schnetler also said that "incident command starts from the first person arriving on the scene, irrelevant of the discipline."

Etienne du Toit, deputy director: Fire Brigade Services, Western Cape Government, discussed multi-agency coordination systems in the context of incident command. Du Toit described the elements of incident command and management and detailed the multi-agency coordination system (MACS). He also highlighted the functional areas of ICS and its management characteristics. Du Toit furthermore detailed the area command of MACS and the types and functions of MACS. He also highlighted the importance for a joint information system (JIS) and the value of speaking in one voice. Du Toit reviewed recent examples of MACS and said that when the provincial disaster management centre was activated, it was for use as a coordination and communication centre and not as a disaster management centre. He also said that during the previous MACS, several challenges were identified, which led to the hosting of the summit. "Incident command is about managing an incident, regardless of size or magnitude. It is a strategy to ensure order during the life of the incident. The system is doomed to fail if all responders cannot work together to achieve the objectives of the incident," concluded Du Toit.

Etienne du Toit

SA disaster response

empowers SADC emergency services workforce

The 12 LMPS personnel that took part in the USAR training provided by RSA and USAID

South African disaster response team, Rescue South Africa (RSA), recently returned from a training exercise in the southern African country of Lesotho, where a three-member crew instructed members of the Lesotho Mounted Police Service (LMPS) on urban and search and rescue (USAR) techniques.

The RSA team spent a total of six and a half weeks in the landlocked country of Lesotho as part of RSA's three-year capacity building initiative for the South African Development Community (SADC) region, in May this year. The capacity building project is funded by the United States Agency for International Development (USAID) as part of an initial 12-month grant, which will be extended to three years if RSA is successful in meeting its proposed objectives at the end of the first year. RSA will make claims to USAID on a monthly basis for the first term of its grant, after which the activities of the organisation will be reviewed by the funding agency for an additional two-year grant.

RSA general manager, Samantha Botsis, says that the purpose of the capacity building exercise is to provide SADC countries with basic skills to act as first responders in the event of any disasters in the region. Botsis adds that the long-term goal of the RSA training initiative is to build up an urban search and rescue task force with the SADC region.

"Ultimately we hope to see a regional task force able to act as first responders to incidents on our own continent. This is part of the reason USAID funds this programme," states Botsis.

In Lesotho, RSA assessed the needs and requirements of the country's police services and developed a two-pronged approach to 'get skills on the ground'. Botsis says that a sustainable model for capacity building was adopted by RSA in the organisations training exercises in Lesotho. This involves the selection of five members of Lesotho's police force ▸

George Vosloo and Fanie Brill

The LMPS being instructed on the correct use of vehicle extrication equipment by Rescue SA

and developing these individual into accredited USAR instructors, in order to continue to roll out the training programme in the country.

RSA reports that 25 members of Lesotho's police service took part in the initial three-week training course from which 12 students were selected towards attaining accreditation as USAR technicians. RSA instructed these students on three of 12-modules, towards becoming accredited USAR technicians. The three modules were confined space rescue, high-angle rescue and light motor vehicle rescue. "They had exams and practical assessments from the University of Johannesburg (UJ) and are now certified in three UJ accredited courses," confirms Botsis.

RSA instructed the initial group of trainees from the Lesotho police force on five foundation courses including basic first aid, swift water/ flood awareness, hazmat awareness, incident command introduction, as well as the United Nations (UNs) International Search and Rescue Advisory Group (INSARAG) first responder.

UJ-accredited assessor and moderator, Fanie Brill, was one of three USAR technicians who rolled out the USAR training in Lesotho. Brill says that the Lesotho police are the first responders for all emergency incidents in the country. He adds that they had very little prior experience in working with the technical equipment required to perform the emergency search and rescue services that they are required to perform in the country.

USAR technician, George Vosloo, says that the training courses had to be modified in order to accommodate the students in Lesotho. The basics of caring, storing and the correct use of the search and rescue equipment formed part of the training exercises. Brill adds that the lack of adequate search and rescue equipment in the country was a 'big challenge' in conducting the training exercises. Brill mentions that the impound vehicles from the Lesotho police was used for the vehicle extrication exercises, while the national sports stadium in Maseru was used to conduct the high-angle training.

"We must however draw a line between the circumstances and the people. They are like sponges. They absorb all you give to them. We began our training on a holiday - Ascension Day - and they were all there," mentions Vosloo.

Brill says that after six and a half weeks of intensive training and assessments the students were now able to effectively respond to rescue scenarios in the country. "These people will now save a life based on the training exercises we provided," he says.

Vosloo says that the RSA team gained valuable insight from their Lesotho trip, which will assist them in their capacity building exercises in other territories in the SADC region. "We learned quite a lot about conducting training in other countries and also the ways of communicating and the proper channels to follow to get the desired results", explains Vosloo.

The proposal made to USAID by RSA was to conduct a scoping exercise in Namibia, Botswana, Zambia and Lesotho over a 12-month period and the Lesotho training model will be replicated in the four other countries in the SADC region, reports Botsis.

"These countries are all within driving distance. We are able to transport our equipment and there is not a language barrier. So, it was a simple selection process for the countries we work in," she says. RSA had already conducted its scoping exercise in Zambia and instructors were set to begin training in the country in mid-June this year.

Confined space rescue formed part of the USAR training provided by Rescue SA in Lesotho

The Southern Cape FPA coordinates all aerial fire fighting operations in its area that spans four-million hectares

FPA looks after four-million hectares for the regions year-long fire season

Fire advisor and chairperson of the Southern Cape Fire Protection Association (SCFPA), Paul Gerber, says that the FPA partners with Working on Fire (WoF) to provide an area of coverage spanning four million hectares in the Southern Cape.

"It is important to remember that the SCFPA has a fire season that lasts the whole year," states Gerber. He mentions that the SCFPA, which is a member of the Western Cape umbrella FPA (WCUFPA), is divided into a western and eastern region, which assists the FPA in managing the vast area in the Southern Cape that is prone to wildfires throughout the year.

Knysna in the eastern region of the Southern Cape acts as the head office of the SCFPA and the western regional office is based in Riversdale, located on the southern Western Cape Province.

The SCFPA is responsible for six WoF teams and two helitack teams dedicated to fire fighting efforts in the region, with additional teams based with other partners and FPA members in the region. These partners include the Eastern Cape Parks Board and South African National Parks (SANPARKS), as well as timber company, CapePine and biodiversity conservation institution, CapeNature.

The Southern Cape area has extremely high fuel loads - Paul Gerber

Gerber says that the SCFPA is primarily dedicated to assisting with the incident command system (ICS) and other fire fighting functions in the event of wildfires, as opposed to being a dedicated fire fighting service. "We are also involved in coordinating aerial fire fighting in the region, but our main purpose is to implement integrated fire management and to assist our members to act as fire responders to wildfires," he says.

This is in line with the SCFPA's vision that is to promote integrated fire management in the Province to mitigate losses to social, economic and ecological assets by adopting and implementing fire awareness, protection and prevention strategies, as well as support during fire suppression operations.

Resources

The SCFPA is divided into 60 fire management units (FMUs), which act as a first response to wildfires in the region before the arrival of the fire brigade, mentions Gerber. The SCFPA is responsible for the construction of an integrated wildfire management plan for each off its management units, which promotes best practice, prescribed burning and compliance to all applicable legislation.

Two Huey helicopters, two fixed-wing bombers and two spotters are available to the SCFPA for its summer fire season operations. During the winter fire season this year, the SCFPA will lease on UH-1H Huey helicopter ▸

from integrate fire management services organisation, FFA Group of Companies, reports Gerber.

He says that the SCFPA also coordinates secondary bases for the fixed-wing bombers employed by the company for the region's fire fighting efforts. The aircraft are on standby throughout the summer season courtesy of funding from the Southern Cape provincial disaster management centre (PDMC), mentions Gerber.

Other resources available to the SCFPA at its central base operations in Knysna are various communication systems including a hi-band radio communication system, a portable mid-band repeater, as well as aviation radios.

Management

The SCFPA executive chairperson is based at the FPAs head office in Knysna, which has a full time management team consisting of an eastern regional manager, eastern regional manager, eastern regional extension officer, operational support officer and full time administration personnel. In Riversdale, a team comprising of an area manager, extension officer, a base manager for the UFPA and another base manager to coordinate the regional WoF teams, which includes a helitack team and bomber loaders.

The SCFPA is a member of the WCUFPA, mentions Gerber. He says that the WCUFPA does not have dedicated offices, adding that the UFPA chairman is based in Newlands in Cape Town and is also the chairman of the Cape Peninsula FPA. "The WCUFPA has no other resources at this stage, but is the body that negotiate on behalf of the different member FPAs," says Gerber.

Regional statistics

In 2012, the Southern Cape experienced a total of 1 500 incidences of wildfires for the region up to March 2013. A total of 14 124 hectares was burned during this period, with fire suppression costs for the region adding up to more than R3 million for the fire season in 2012.

The losses suffered in the region during this period as a result of wildfires included a total of R5 380 000 in structural damage and R290 000 in equipment losses. The losses in the agricultural industry totalled R550 000 and damage to natural vegetation was about R135 000 in 2012, reports the SCFPA.

The SCFPA is in the fynbos biome that has a year-long fire season

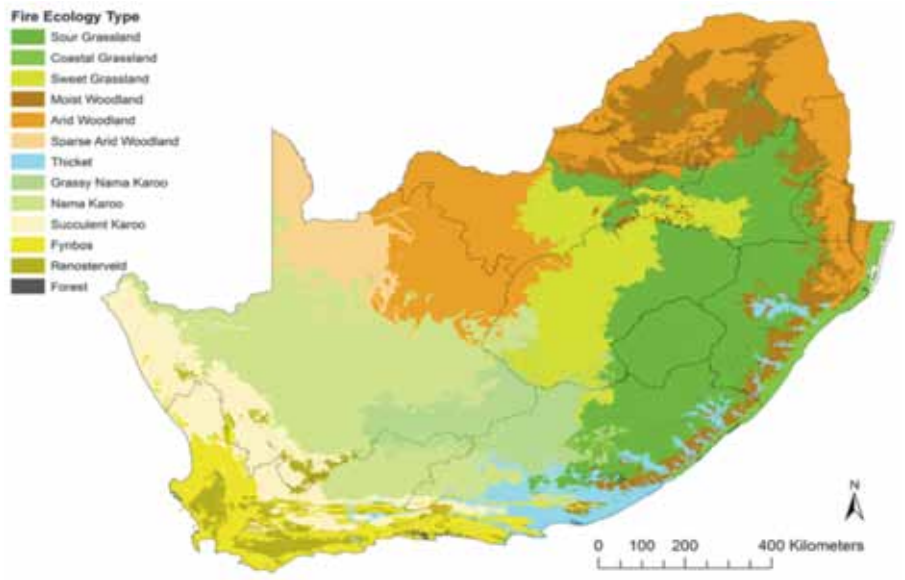


Illustration of South Africa's fire ecology

Integrated fire management cycle

Gerber states that the coastal region and the mountains in the Southern Cape are the two areas in the province that are most prone to wildfires. He adds, "We have areas that have not been burned in the past 20 to 30 years and big areas with extremely high fuel loads." Gerber expects a busy fire season in 2013 with the 'possibility of mega fire' in the Southern Cape.

Gerber mentions that the integrated wildfire management plan adopted by the SCFPA will prevent the 'mega fire', mentions Gerber. He says that if the expansive natural vegetation in the region is not managed adequately, the possibility of huge wildfires will always be a factor for the Southern Cape.

Using psychology

to support building design/safety

By Lenny Naidoo

Have you ever noticed the different ways people react in an emergency; some will cry, others will scream, some may just freeze, many will start to pray. The worst type of reaction is hysteria, which can spread to affect even calm people. Equally as bad is the element of selfishness that can originate when one's life is threatened.

Emergencies in occupancies that have large numbers of people gathered, often lead to many casualties and deaths. This happens year-after-year despite all the advancements in fire safety/fire prevention and building design. Hotels, discos, sports stadiums etc are designed to ensure the safe evacuation of its occupants in an emergency yet, even small incidents result in loss of life.

For many years, fire safety engineers worked under a simple assumption: When a fire alarm rings, people will evacuate immediately. How quickly people manage to vacate a building, they believed, depends mainly on physical abilities, the location of the nearest exit and the behaviour of the fire.

This concept does not take into account the often-surprising behaviour of people during emergencies. In fact, research shows that as much as two-thirds of the time it takes occupants to exit a building after an alarm sounds, is start-up time; time spent milling about, looking for more information.

In 9/11's wake, researchers across fields are drawing on behavioural science to better understand people's reactions during fire emergency evacuations; an effort they hope will lead to safer buildings.

Such findings have big implications for architects, engineers and emergency planners hoping to design safer buildings. Now, after the 9/11 terrorist attacks, this kind of human-based evacuation research is getting more attention and funding. Studying how occupants reacted as events unfolded and finding out what helped or hindered the evacuation efforts, could provide invaluable information for future high-rise designs says, Dr Robyn Gershon, a professor at the Columbia University Mailman School of Public Health who studies high-stress, high-risk work environments and is leading the study of the evacuation.

"This is going to impact high-rise emergency preparedness in a major way," says Dr Gershon, whose doctorate is in public health. "Just like the Triangle shirtwaist factory fire [in New York City in 1911] led to the first fire codes ever, this is going to be a turning point." ▸

Reaction of the average human in an emergency

Psychologists have been studying how people react during fires for more than 25 years. The classic myth is that people exit immediately when they hear a fire alarm. That they don't, should be obvious to anyone who's ever taken part in a fire drill, says Dr Norman Groner, a professor in the department of public management at the John Jay College of Criminal Justice in New York.

"People's natural inclination is to want to define a situation before they respond," he explains, "and an alarm bell is inherently ambiguous. You could say that people are too smart for their own good," Dr Groner says. "They understand that the probability that an alarm indicates a real fire and one that actually threatens them, is extremely low."

Using both of the most common research methods, observing evacuation drills through hidden cameras and interviewing fire disaster survivors, Dr Guyléne Proulx, a senior researcher at the National Research Council of Canada and an architectural planner by training (though she says that she's often mistaken for an environmental psychologist because of her interest in human behaviour) has found it takes people an average of three minutes to begin leaving a high-rise apartment building. Although that doesn't sound like much, during a real fire those three minutes could be deadly, she says, because fire develops so rapidly.

Myths about how people react

Researchers have discovered other tenets of people's behaviour during fires. Some examples include:

- People generally do not panic. There's still a myth in the public mind that people 'panic' in an emergency, but in fact panic is very rare, says Dr Groner. "Usually when people say they panicked, they just mean that they became fearful, not crazy or irrational," says Dr Proulx.
- People are often altruistic. In an emergency, strangers will often help each other out even when they put themselves at greater risk by doing so, says Dr Groner. Dr Gershon adds that altruism is also linked to familiarity. That is, people are even more likely to act in helpful ways when they know each other.
- Most people will try to exit through the door they entered. This is true even when emergency exit signs are well marked, says Dr Proulx. "When you think about it," she adds, "that makes sense. During an emergency occupants don't want to use an exit they have no experience with; they don't know where it will lead."
- People will move through smoke when necessary. Fire safety engineers used to believe that people would turn back when they encountered thick smoke. "In reality, researchers have found that people will move through terrible smoke if they feel they must in order to survive," Dr Groner says.
- People are inertial creatures. People don't like to stop what they're doing and often a fire alarm isn't enough of a cue to get them to drop their everyday tasks and exit a building. It's the accumulation of multiple cues, fire alarm, smoke odour, urging from co-workers and such, that will finally convince them to do so.

Panic and human behaviour

'Panic' is usually defined as some sort of irrational behaviour. The word panic is frequently used by the media to describe the actions of survivors and victims. Victim's deaths are loosely attributed to panic and sometimes this could be the scapegoat for the real reason, such as poor building design.

The media is a great fan of the panic concept. Following the Beverly Hills Supper Club fire in the USA in 1977, The Sun's headline was "Panic kills 300," the Daily Mail had "Panic and 300 stampede to death."

The cinema has used the concept of panic to its extreme, portraying hysterical occupants in a variety of emergencies, including fires. Many film enthusiasts will recall the 1974 Towering Inferno and the mad attempts of guests to escape in the stairs and on the roof.

What is frequently reported as 'panic' is behaviour with an unsuccessful outcome that was observed in other people. The term is also used by people to describe their own state of heightened anxiety, while the actions they report taking themselves are usually logical and appropriate. Indeed, it can be seen frequently in the media's reporting of fires. There are many examples in the reporting of mass casualty events, where the media has determined that the cause of the deaths was panic.

Station nightclub fire, USA, February 21 2003

In media reports of the fire at the Station nightclub in 2003, several survivors mentioned panic behaviour. A news video, shot inside the club as the fire and evacuation began, shows no evidence of panic. However, as conditions inside the club rapidly deteriorated, as in the Beverly Hills Supper Club, evacuees had to contend with two elements of panic: hope to escape through dwindling resources and aggressive concern about own safety. A review of media accounts that is currently underway has found several cases where evacuees describe aggressive behaviour, either their own or others, but do not mention cases of irrational or illogical responses. Pushing to the exit, even to the point of trampling others, when flames and smoke had overtaken them and the only exit known to most occupants was blocked, cannot be considered irrational or illogical.

How do people react to the call for evacuation?

How people react to fire alarms have been studied in retrospect as well as in experiments. In studies, the choice of exit was examined with respect to the distance to exits and open or closed emergency exit. The second part covers the question on how the subjects think and react in a situation having a small fire in the escape route. The third part deals with some communication aspects regarding identification of signs. It is shown that the subjects prefer a familiar ordinary cash exit, even if the distance is longer to that exit than to the nearest emergency exit. However, if the emergency exit is open and the subjects can see the outside, the attractiveness becomes much higher for the emergency exit and most of the subjects choose the emergency exit. ▸

The identification of alarm using a ring signal, perceives often as a general warning or some kind of a conventional ring signal, such as a telephone or school ring signal and it is more seldom perceived as an evacuation signal. A spoken message, on the other hand, has a great impact on understanding what to do and gives a better and more appropriate behaviour for the evacuation of the building. The understanding of signs, important in a fire evacuation situation, is very good for signs, such as emergency exit, but rather low for signs not so frequently used, such as a sign for radioactive material.

A fire in a nursing home (Edelman, Hertz and Bickman, 1980)
The staff led the patients, 85 patients, corresponding to 95 % of the patients on that floor, down one staircase, although there were another three available. The staircase used was the one normally used by patients, as well as personnel, as a route between the two floors. The other three staircases were emergency routes, fitted with entry alarms and were therefore not used. These staircases had negative associations for both the patients and the staff and it was natural for them to use the normal staircase, even when evacuating the building. The evacuation, therefore, took longer time to perform than was expected by the building designer.

When dimensioning evacuation routes, one should already at the planning stage be aware of how the routes are to be used. People usually choose to leave a building the same way they came in, even if this is a poorer alternative than other available. Within the field of behavioural science, it is pointed out that people often choose the known before the unknown, which would explain the above behaviour. Dr Jonathan Sime has presented a study of the use of evacuation routes, in which he arrived at the conclusion that knowledge of and familiarity with routes, are important if they are to be used. According to Dr Sime, this is more important than the width or length of the routes.

Category	Escape route	Share, %
Public	Staircase A	71
	Escalator	22
	Window	7
Staff	Staircase A	27
	Staircase B	41
	Escalator	5
	Window	14
	Roof	13

Figure 1 (Sime and Kimura, 1988).

When leaving the bar in a large building, most of the guests preferred to leave by the same door as they had entered,

The majority of the staff, however, chose to leave via the emergency exit, which they also had used to enter the hall. The fire had not reached the hall at this time. The location of exits is also important for their use. In an auditorium, it is better to have the emergency exits located at the front of the room so that they can be seen by the people sitting in the auditorium.

Designing escape routes

Proposed solutions
The key now, says Dr Groner, is to incorporate findings like these into buildings and building evacuation systems. Proposed solutions include:

- Vocal alarms: A vocal alarm that instructs building occupants to evacuate is more convincing than a simple bell, Dr Groner says. And, if that alarm were operated by a security desk or fire command centre that could monitor the course of the fire, a vocal alarm could even alert building occupants to the location of the fire in the building and recommend safer evacuation routes, he adds.

- Automatic exits: An alarm system might automatically open emergency exit doors, notes Dr Proulx, showing people those doors are safe to use.

- Comprehensive building orientations: In the World Trade Centre, many employees had never tried to walk down the emergency stairwells from their offices to the ground floor and had no idea whether they could do so or how long it would take, says Dr Gershon. New employee or new-tenant orientations in high-rises should include a comprehensive introduction to the building's emergency-exit system, she suggests.

Findings like this have begun to convince even non-psychologists of the importance of human behaviour in any study of fires. A case in point is mathematician, Dr Ed Galea, who develops computer models that estimate how a fire would spread through a particular building and how its occupants would get out. Head of the fire safety engineering group at the University of Greenwich in the United Kingdom, Dr Galea says he cannot create accurate models without understanding people's typical fire behaviour.

On the positive side, some recommendations are starting to make their way into legislation; it is now mandatory for high-rise buildings to conduct evacuation drills at least once a year in the United States.

Are you waiting
on a leader to show up?

By Wayne Bailey

Wayne Bailey

I don't have the opportunity to respond to calls like I once did, but I do serve on a local fire department board and talk frequently to fire fighters while at the station. I often ask "What can I do for you or make life easier for you from the Office State Fire Marshal perspective? I usually get a reply; "A million dollars would be good to start with." After giving me a sheepish grin, they open up to me on their needs. It could be more training opportunities, add more regional exams in the state or why does the test have to be 100 questions? All good requests and comments and most of the time it is something we can do. Though my responsibilities have grown over the years, our major responsibility is making sure our fire and rescue personnel have the needed training so "Everyone goes home."

There is a well-known story of Mother Teresa that happened some thirty years ago in Calcutta. Late one evening her sisters came to her concerned that there was no bread for the next day for them to feed the hundreds who would be at their door in a few short hours. Mother, undaunted by the news, told her sisters "Earnestly pray and go to bed, tomorrow, if need be, we will beg on the streets to feed the poor." Very early the next morning some schools in the area were closed unexpectedly and they sent truckloads of bread that were designated for the schools to the Missionaries of Charity.

Now, the second part of this story is a miracle. The schools closed and truck loads of bread showed up on the door step of the school.

What I didn't know was that Mother Teresa had told them if the bread did not come they would go out on the streets and beg for the poor themselves. She and her sisters would beg on the poor people's behalf. She was not going to convene a task force on hunger or "see what she could do."

She was willing and planning to go out and beg for food for those she believed that God had entrusted in her care. No committees, no speeches, no assessment of the need, she knew people were hungry and that was all that mattered.

Mother Teresa was known to say "Don't wait for leaders." Her and her sisters were prepared to do what was necessary to feed those who were hungry that morning. Now, in emergency services, we do have incident command systems (ICS) and the national incident management system (NIMS) in place to manage our fire grounds. It's necessary to have someone looking at the big picture and watch our backs.

There are times when a leadership position are not needed while back at the firehouse. How about a car seat check unexpectedly from a mom with three kids? Taking a blood pressure of someone that stopped in just to make sure their health was not in danger? Don't hand off the task to someone else, be the person that will accept these responsibilities and more. My thought is you act like a leader before the position is bestowed on you. If you're already a leader, lead the way by an example. One way to lead outside the fire service using the story of Mother Theresa, is to help the less fortune at a local rescue mission and feed the homeless or be a mentor to kids. Whatever you do and it's for the good for the community, you're on the way of becoming a leader.

Combined training exercise: lessons learnt

By Schalk van der Merwe, lecturer, Cape Peninsula University of Technology, Department Emergency Medical Sciences

Cave rescue simulated: hiker fell through a crevice (skylight) into a cave system

In the South Africa, the Universities of Technology (UoT) are responsible for providing apex tertiary education qualifications in prehospital emergency care. While rescue training is included in the South African Qualifications Authority (SAQA) approved curriculae for emergency care practitioners, the actual course content varies dependent the education provider. This course content has been developed by best practice and experience independent of regulatory body oversight, or best practice guidelines, albeit that example of such regulation and guidance are available in the form of codified standards implemented in other countries.

In order to share best practice in teaching and learning, a combined rescue training exercise was organised for the institutions. The Western Cape provided an ideal location with an abundance of mountainous terrain for wilderness search and rescue (WSAR) and natural high angle training. While locations for urban high angle training are available in the Western Cape, it is over shadowed by natural high angle incidence. As these two modalities share many overarching principles (with minor adaptations in paradigm and operating procedures), the training exercise focused on natural high angle training.

Participants from the following institutions took part in Inter-Varsity Rescue Week 2012, focusing on a variety of high angle topics:

- Durban University of Technology (DUT)
- Central University of Technology (CUT)
- Cape Peninsula University of Technology (CPUT) – the host/ convening institution
- University of Johannesburg (UJ)

With the exception of one institution where faculty only attended, all UoTs where represented by faculty and student (rescue) teams. Student participants were provided with the opportunity to demonstrate their rescue skills and competencies, with lecturing staff on hand to provide guidance and critique when required.

Format

The event took on the form of a combined training exercise, so as to facilitate learning and interaction amongst lecturers and students alike. The intensive program included various rigorous activities to challenge participants, with the added complication of the hostile elements of the Cape Town winter. During such training the realistic instructor would always want to expose students to as many different items of equipment and scenarios as possible in preparation for actual rescues. Not only did this exercise bring together different technical rescue approaches and teaching methods, but also some unusual rescue equipment, some completely novel to participants.

Day one

Each team had the opportunity to construct their preferred high line, which they felt the most proficient with; as expected different systems were constructed each with their own merits. As expected, different systems ▸

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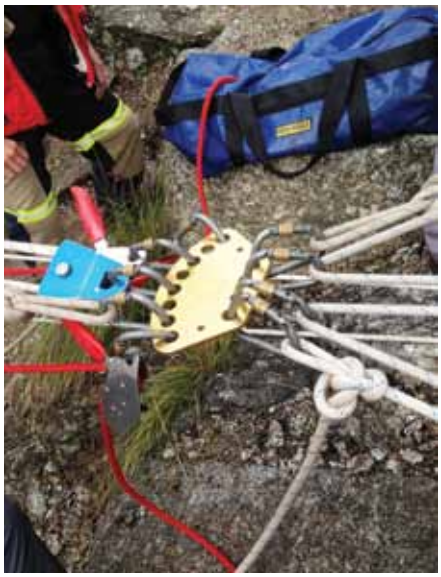
Highline construction on day one



Floating anchor as constructed by Durban University of Technology

Blackdiamond Trad rack

Kootenay carriage system

were constructed each with their own merits.

The Kootenay system proved a firm favourite, although we (at Cape Peninsula University of Technology) more often teach the 'flying crane' system, also known as a reeving high line. This is mostly due to equipment availability, specifically Kootenay pulleys. The constructed high line rescue systems were critiqued with some natural discourse on their merits and application noting the 'take home points'. One rescue team made use of a Kootenay pulley as anchor in the construction of a tensionless hitch that was particularly useful due to the terrain. The local participants were also exposed to festooning during the exercise, which was possibly neglected in the past due to the shorter length of high lines being built.

Some of the equipment and techniques applied included:

- The hands-on demonstration of nuts and cams (trad rack) and the sinking of anchoring bolts and the factors that comes to play
- Different tripods (Auz Pod and Arizona Vortex) and the variations

High line tensioning system

Kootenay high-line, patient being evacuated to opposing side

- in use to bi-pod and the gin pole exposing the advantages of the different configurations

Day two

Team dynamics were further challenged by an amalgamation of the rescue teams to form two teams to manage a simulated rescue incident. This was by far the most challenging day for the rescue teams and lessons were learnt on how teams from different backgrounds may initially face challenges working together at a mass rescue incident. Leadership became the key through student incident commanders and the students were encouraged to act autonomously under the watchful eye of the lecturers.

The rescue exercise was used to gather empirical data using load cells during the construction of the rescue high line that had a span of 85 metres and an approximate drop of 30 metres at the highest point. A Koontenay system was build (x2 13mm mainlines) over the breath of a quarry that had approximate drop of 15 to 20 metres. The objective was to rescue a patient from a boulder within the quarry by means or stretcher. The rescue simulation took approximately three to four hours to complete. The focus was on the technical parts of the operation with certain neglect on the medical intervention within medical rescue, which will be explored in greater detail at a later stage.

Day three

The day's exercise was dedicated to what could be described as a combination of a wilderness search and rescue (WSAR) and high angle rescue (natural) with some elements of confined space rescue. The simulated rescue scenario of a hiker that fell through a crevice into a cave, safe access and patient retrieval, was the focus in this hostile and remote environment. The simulation proved to be much more than a hike up the mountain and simple retrieval of a patient in a scenic environment. The valuable lesson learnt is that the only piece of equipment in rescue that is light and never left at home is knowledge!

Festooned high line with imminent edge transition

On the day, the two rescue teams conducted independent rescue simulated scenarios at different locations on Table Mountain with similar scenarios, but different challenges. Up until this exercise, the student participants (rescue teams), had the luxury of an equipment cache at the staging area. However, now the teams had to divide the equipment and establish a staging area situated a significant distance from the rescue vehicles within a national park. This meant that the environment had to be treated with the utmost respect. Needless ▸

Patient packaged and ready for hoist

to say, some challenges were experienced in terms of equipment availability at the site of the rescue. The hidden danger associated with WSAR could within the blink of an eye severely hamper the effort (rescue), especially in a smaller team when a member, for instance, sustain something as trivial as a sprained ankle. Such an injury was sustained on the day, but did not impact on the rescue as it was not a critical member of the group. The size of the group also made it manageable.

Lessons learnt

During the debrief discussions and post exercise meeting, the following observations were made:

1. Team integration was a challenge and this could be attributed to differences in teaching, competence and experience. Names and terms (lexicon) are not universal and differ in different parts of our country. This led to communication difficulties and mistrust at the onset of the event. Think multi-agency.
2. Unfamiliarity with the environment proved a challenge, where some rescue teams were used to an urban high angle setting where there is some form of railing or edge wall providing a relative safe working area. Whereas on the mountain, there was greater emphasis on edge restrictions and an exclusion/ safety zone. Paradigm.
3. There is seldom a single solution or method to solve a problem and the possibilities are legion, providing its safe. Problem solving.
4. Preplanning will vastly improve your performance; you won't always have the luxury of having it all (equipment)! Planning.
5. A need for standardised training or a form of consensus throughout the various institutions. Standardisation.
6. On graduation, the assignment to the workplace will not be restricted and students will be guaranteed to find themselves working with units comprising colleagues who have trained at other institutions. Familiarisation.
7. An added complication is that the work is not performed in isolation from multi-agency rescue units.

In conclusion

The week concluded with a tour of the emergency and rescue facilities in and around Cape Town, South Africa. A consensus meeting and discussion was hosted to unpack the lessons learnt in the Inter-Varsity Rescue Week 2012 and agreement was reached to collaborate on matters including:

- Rescue teaching and learning
- Sharing of resources and information
- Establishing an adverse event reporting system
- Open invitation for current faculty to attend rescue evolutions (modules) at other Universities of Technology

The take-home message is that a rescue team will function optimally if they train together and do so often, no matter where the practitioner received their specialised training!

The participants left with the desire to establish Rescue Week as an annual event with a focus on a different rescue specialty each year and with the ambition of increasing the professional progression of participants' technical skills.

Stretching and advancing handlines in structural fire fighting (2)

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

Last month I dealt with the science of deploying handlines during structural fire fighting operations. This month I will attempt to address the safe and effective advancement of that line into a fire structure and ultimately to the seat of the fire.

Standard response

As I mentioned in the previous article, the standard response to a structural fire in this country is one officer, one engineer (driver/operator) and two fire fighters. In some cases the response is limited to three persons; one engineer with the officer assisting the nozzle man in advancing the attack line. For many fire services, the latter scenario is the reality and although not ideal, can be done with sufficient planning. A two-crew engine company should never be considered. It is dangerous and will not allow you to achieve even the most basic of tasks effectively.

So let us consider that we have an engine company crew of four (or more). What is expected of each member? The engineer is the pump operator and needs to ensure a consistent flow of water, while at the same time continuously evaluating the pump performance and water source. This is normally an experienced fire fighter who has had his/her fair share of schlepping hose and would generally be able to recognise any changes in the pressure on the attack line, by anticipating what the nozzle team is doing at that particular point in time. In a scenario where a three-man engine company is working a fire and the officer is assisting the nozzle man with the fire attack, the engineer may be relied on to provide the bigger picture. The main point here is to have good radio communication and to ensure that the nozzle team is kept up to date with prevailing conditions. Hopefully, there will be more units on scene and this function can be escalated to a sector commander or the incident command staff member, depending on the level of command deployed at the incident.

Two crew members must be allocated to the nozzle team. The first fire fighter is designated the 'nozzle fire fighter' and is responsible for directing the water stream onto the seat of the fire. The second fire fighter (backup fire fighter) is responsible for ensuring sufficient movement of the hose for easy advancing of the line and resisting the nozzle reaction, thereby enabling the nozzle fire fighter to easily manage it.

If you are fortunate enough to have a third fire fighter available, he/she can be used in a 'door' position whereby he/she facilitates a smooth advance by feeding hose to the nozzle team.

First-in officer

The tendency of certain modern day fire services to remove all staff with the rank equivalent of station commander (or higher) from shift work and deploy them to work standard office hours, is problematic and should not be encouraged. This results in the first responding units to incidents being commanded by fairly junior personnel, who do not yet have the experience to make the crucial decisions needed in the first few minutes of a potentially devastating fire. The first arriving officers would generally respond from their homes at their own discretion and seldom do the two arrive at the scene simultaneously. This has the added complication of junior officers gaining more operational experience over the years than the people they have to report to. ▸

A two-crew engine company should never be considered

Granted that a fair number of services employing this practice have ensured that their first responding sub-officers are adequately capacitated to make these decisions.

The company officer is generally a working officer who might be required to assist with the stretching and advancing of the handline. This will obviously detract from his ability to perform a 'hands-off' command role. Should your standard operating procedure (SOP) include a two engine response, the first arriving officer should only concern him-/herself with a quick initial exterior size-up of the fire structure (while the handline is being stretched) and prevailing conditions and, if possible, try to get a picture of the interior of the structure. He/she should then communicate this information to the next arriving officer who should assume the position of incident commander and then further decide on the strategy to be employed. The first-in officer can then enter the structure as part of the hose team and either assist with the movement of the attack line or supervise the interior attack.

In a situation where persons may be trapped, all efforts should be focussed on search and rescue. In this case the attack line should be rapidly advanced in order to protect the search and rescue crew. Having only the nozzle team and an officer available to do this will be extremely difficult and dangerous. The handline should at all times be available to protect the search and rescue team and will, in many cases, have to actually perform the rescue themselves. The obvious solution would be a multi-alarm response if the person reporting the incident indicates possible entrapment, if entrapment is only confirmed upon arrival (and it is a single engine response) backup must be called for immediately.

Should the initial response include a ladder company, the engine company officer should use the ladder crew to provide information on the location of the fire. In a multi-storey apartment complex, he/she should try to get a good idea of the layout of the apartment that is on fire, to assist in determining the positioning of the attack teams and length of hose line required. It might also be advisable to go to the apartment directly below the fire floor to get an idea of the number of doors, left- and right turns, distance to the door etc.

Also, never underestimate the information that can be gleaned from occupants, neighbours, complex supervisors and maintenance staff. Try to have someone interview them as soon time allows.

The nozzle team

The fire fighter assigned to the nozzle (nozzle fire fighter) will direct the pace and direction of the attack line in his/her sector and will make many decisions, which might not always be communicated to the incident command, but will have an impact on the eventual success (or failure) of the operation.

If no officer is assigned to oversee the interior attack, the responsibility for managing the attack line advance should become that of the nozzle fire fighter. This person should be experienced and understand the doctrine of aggressive interior fire attack. The nozzle fire fighter should

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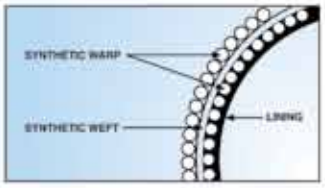

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The importance of adequate visibility can never be overstressed

be supplied with a tactical radio to communicate with the operations commander, pump operator and ladder company crew.

The nozzle fire fighter must be in control of the handline at all times and ensure that the nozzle team never enters a fire room without a charged line. He/she should also determine the position to where they should retreat in the event of a hose replacement or extension.

Fire streams

When performing an interior attack, hose teams should as far as possible employ solid streams rather than fog streams. A solid stream provides greater reach and penetration and is less disruptive to the thermal balance than fog streams. This will enable greater visibility, produce less steam and would be less likely to push the fire. A combination nozzle will have the advantage of facilitating rapid hydro-ventilation that will enable the nozzle team to see the fire sooner, but once this has been achieved, you should immediately change to a solid stream.

As soon as the nozzle team encounters the fire, the process of thermal balancing should start that should then enable the team to approach the fire in relative safety. The stream should be directed toward the ceiling using a Z-pattern or anti-clockwise motion.

Once control over the fire has been established, the angle of the nozzle can be reduced and the smouldering solid fuels can be cooled. At a large fire that has started to roll across the ceiling, the nozzle should be directed upwards to enable the stream to deflect off the ceiling and upper part of the walls, thereby penetrating the thermal column of the fire. As the temperature of the involved area reduces, the nozzle teams should be able to advance on the seat of the fire. Care should however be taken to control the speed of the advance and not have the nozzle teams move too close to the water cascading off the roof. This can result in severe injuries to fire fighters due to the boiling water and steam dropping onto them.

As a nozzle team advances on a fire, it is important to present as small a target as possible to any possible threats that may be present in the fire area. Moving low and close to the floor will not only achieve this, but also keep them under the hot air that will still be present. As the team advances, they should periodically sweep the floor directly in front of them with the stream. This will remove any hot or burning debris in their way and also 'sound out' the floor for any indication of weaknesses or holes that may have developed.

The team might have to resort to advancing on a fire whilst on their knees. Caution should be taken to avoid any nails or other sharp objects that could penetrate bunker gear and cause serious injury.

The importance of adequate visibility can never be overstressed. Teams must be careful not to advance into an area (or onto a surface) they cannot see. Compromised structural elements, host surfaces and other foreign objects could severely injure fire fighters in these areas and shift the entire focus of the operation. Usually with tragic results.

Backup

The backup fire fighter must work in unison with the nozzle fire fighter and ensure an effective advance of the attack line. It is important that both fire fighters understand one another's way of working. The only way this can be achieved is if they train together often in as realistic an environment as you can find. Speak to someone who has some old marine containers that they want to get rid of and get your hose teams to practice entry, thermal balancing and advancing handlines. This is a relatively inexpensive way of making sure they understand what they will be up against next time the fire bells drop.

The backup fire fighter needs to ensure that the last metre of hose is kept in as straight a line with the fire as possible. To achieve this, the backup fire fighter should always try to exaggerate the movement of the nozzle to twice the angle achieved by the nozzle fire fighter.

As the nozzle fire fighter will be intensely focussed on directing the water stream to its intended spot, the backup fire fighter is in a great position to monitor the overall situation and alert the nozzle fire fighter to any hazards or changes in the fire behaviour or structural conditions. The two crew members must try to maintain physical contact as much as possible in order to transfer critical information when necessary.

The backup fire fighter may at times have to move a short way back down the line to pull hose around

any obstructions and ensure its unhindered movement. At this time the nozzle fire fighter will have to manage all hose reactions alone. If your department has a low manning level and this practice becomes the norm, it would make sense to consider the implementation of solid stream tips that produce less reaction than fog nozzles.

For services having a five-crew response, a third fire fighter can be placed at the entrance to the fire room and ensure that sufficient hose is provided to the nozzle team. The door fire fighter will not normally have a good view of the nozzle team and should therefore provide enough hose into the structure to form a bow in the line. The bow represents the amount of slack that the nozzle team will be able to drag without too much effort as they move forward. The bow method should be employed even if a third fire fighter is not available and can be achieved by making a loop in the line shortly before it is charged. If the fire becomes a prolonged incident and more staff becomes available, it would be advisable to position fire fighters at positions where hose lines could snag or become damaged and have them assist with the unhindered movement of the attack teams.

Physical fitness

Sprinters don't train the same way that marathon runners do. For every physical activity nowadays there is a specific training programme. Fire fighters who will often have to serve as attack teams need to train their bodies to adapt to the strain placed on them by this type of work. During the physically demanding task of dragging a fire hose through a burning structure, nozzle teams must use the opportunity to take very brief breaks whenever possible. They should also train to endure the stress of anaerobic activities and intersperse this with short rests in between. This will quickly recover the heart rate and allow muscles to recover. Adequate hydration is also crucial and staff on scene must be monitored for dehydration and exhaustion at all times.

Safety

Fire fighter safety should always be the first consideration before any interior crews are committed to a fire.

A solid stream provides greater reach and penetration and is less disruptive to the thermal balance than fog streams

In previous articles I have spoken at length about the need for effective and safe ventilation. Cooperation between the ventilation crew and the nozzle team is critical. If ventilation is attempted before an attack line is charged and ready, a very real possibility for rapid fire growth and an early flashover exists. If the ventilation is effected too long after the entry into the fire room is made, the nozzle team could face great difficulty in advancing the attack line and could be at the risk of injury.

Keeping doors open once entry has been achieved might sound simple, but with everything going on in these areas, could be one of your biggest headaches. A closed door can sometimes act as a hose clamp and obstruct the flow of water when you least expect it. For this reason, every member of the attack team should carry a few door chocks with them that they will easily be able to wedge into the opening of a door hinge to ensure it stays open.

Also ensure that doorways and passages are, as far as possible, kept clear and unobstructed. This doesn't only allow for safe movement, but also permits the inflow of fresh air to replace the products of combustion being displaced by the water streams.

At all times nozzle teams must communicate their position in the building to the incident command and this must be noted. The monitoring of remaining air in your breathing apparatus will be your primary indicator of how far you can advance into the structure. Respect what your equipment can do and react early and promptly to any warnings that may ensue.

Remember: Don't let your inclination to gamble override your ability to run.

Caution should be taken when advancing on knees because of protruding nails etc

Finally

This series of articles has focused mainly on the rapid and effective deployment of fire hose into (mainly) residential structures. The objective is to respond to and prevent damage to people's homes. The people we serve. When responding to a fire we normally encounter the owners or residents of the building involved in the fire. They expect us to be on top of our game and to put the fire out with as little damage to their property as possible. Therefore, in our training, our planning and our general approach to our job, we should concern ourselves primarily with this.

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To enhance the sustainability and protection of life, livelihoods, ecosystem services and natural processes through integrated fire management in order to contribute to economic empowerment, skills development, social equity and accelerated service delivery.

WORKING ON FIRE

The **WORKING ON FIRE** (WOF) Programme is one of the most successful components of the South African governments Expanded Public Works Programmes designed to alleviate poverty through skills training and the creation of job opportunities. The WOF Programme draws beneficiaries from impoverished communities and transform formerly unemployed and in some cases unemployable youth into fit, disciplined and trained veld and forest firefighters, which are deployed at over 100 bases in fire prone areas across South Africa. South Africa has created a world record proportion of women in the ranks of these firefighters, where some 30% are young women.

The impact of this programme has been widely recognized through the accolades which it has been awarded over the years. Not only has the WOF Programme made a huge contribution to South Africa's veld and forest fire fighting capabilities, but the modest remuneration which the WOF Programme beneficiaries receive is a critical relief measure from the depths of poverty experienced by so many in South Africa. Their income represents a real contribution to the lives of the beneficiaries, their families and communities where they live.

WOF beneficiaries not only receive specialized training in various fields related to their veld and forest fire fighting work but are afforded to progress in the ranks of the WOF structure to become Type II then Type I crew leaders as well as branching out into the management and administration functions in the programme. Some 84 former fire fighters have already progressed into such positions such as instructors, regional managers, media and community liaison officers, financial clerks, stores and procurement administrators, etc.

The WOF Scholarship Fund is intended to provide resources to aspirant current and former wildland fire fighters still engaged by WOF to pursue further formal training to improve their skills and knowledge. The fund will be managed by a committee consisting of former fire fighters and programme managers, chaired by the executive chairman of FFA Operations, the company implementing the WOF programme.

Contributions will be solicited from the general public, both domestically and abroad, corporate social investment resources and public and private institutions both in the form of general contributions and targeted funding initiatives. Individuals or institutions may also choose to sponsor a WOF beneficiary pursue their further studies or training. The intention would be to register the WOF Scholarship Fund as a public benefit entity to allow for tax deductible contributions from the corporate sector. All contributors to the WOF Scholarship Fund will receive annual statements on the utilization of funds and beneficiary progress.

You are urged to make a contribution to this fund which will greatly enhance the ability of the WOF Fund beneficiaries to improve their skills and knowledge and in so doing improve their employment opportunities and contribution they can make to their communities. Contributions can be made via the enclosed pledge form.

For further information, please contact:
The Executive Chairman,
FFA Operations T/A WORKING ON FIRE,
Email: Abrahams@iafrica.com
Tel: +27 (0) 82 557 5069.
Also see the WOF website at **www.workingonfire.org**

Or deposit your donation in the following Bank Account:

Account Name:	FFA Section 21
Account Nr:	405 953 7280
Branch code:	632005
Bank:	ABSA Nelspruit
Ref:	Scholarship Fund

EXPANDED PUBLIC WORKS PROGRAMME
Creating opportunities towards human fulfilment

AGRI SA
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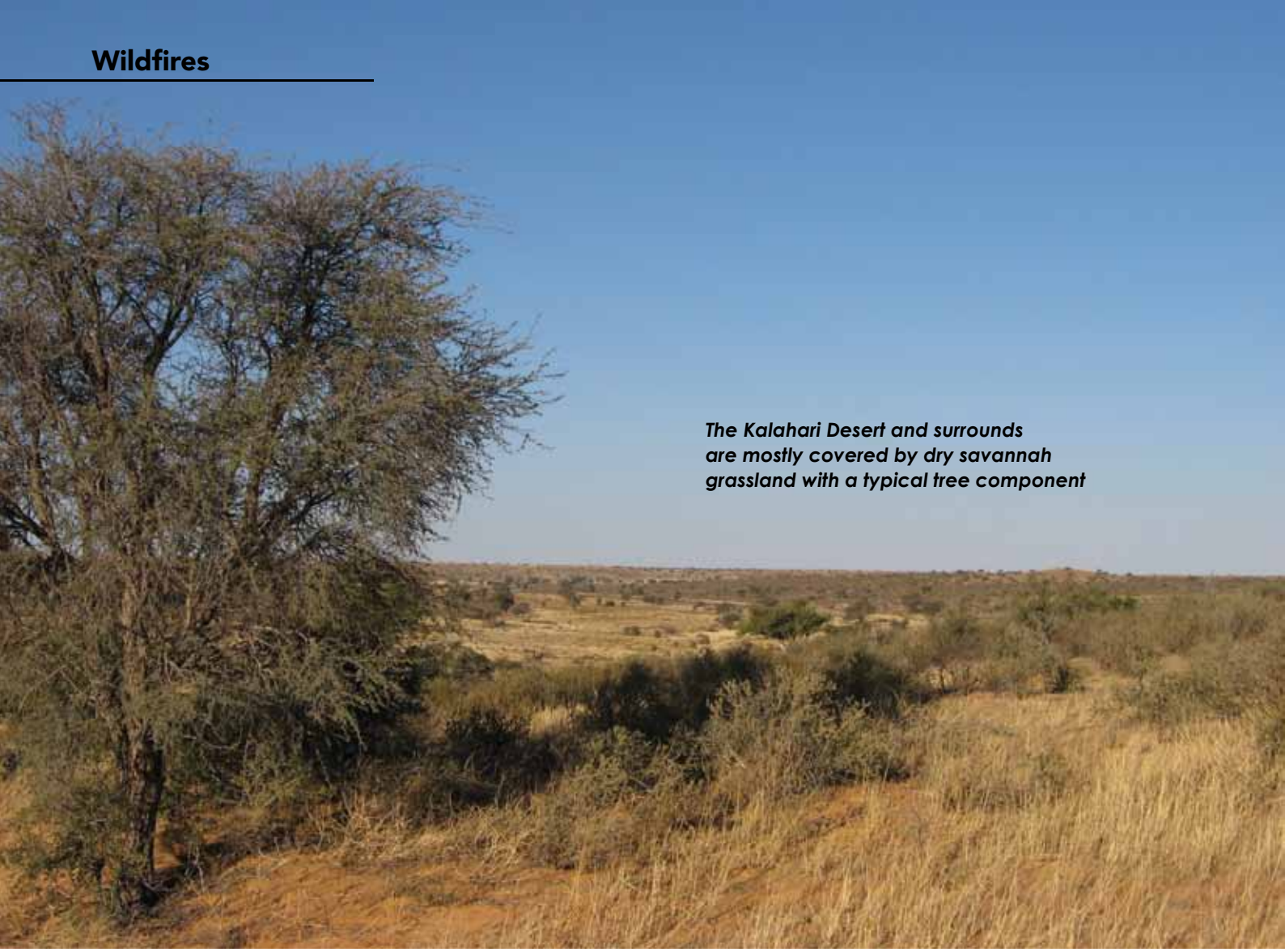


The Kalahari Desert and surrounds are mostly covered by dry savannah grassland with a typical tree component

A realistic review of the Northern Cape and Free State 2012 wildfire season. Are we winning?

By Dr Neels de Ronde

What was the 2012 fire season like?

Without looking at statistics, this years' experience made me come to the conclusion that this was the worst ever fire season since I can remember, at least in these two dry regions! For the first time some mega-fires in both provinces exceeded 100 000 hectare per single fire and within a few days statistics of earlier years were – with regard to size of land burned over alone - exceeded by far, in both provinces. Realistically speaking, why is it that we have never been warned of such extreme fire hazards developing? Have the 'red lights' not been noticed at all?

Off course the first answer to this question coming to our mind is most probably 'climate change', that is the cause of all this! Is it? Have we really experienced such extreme conditions that we can contribute all these terrible wildfires to this alone? I am sorry to disappoint you, but the cause for 2012 being such a disastrous year in these regions, lies much deeper, although some extreme fire hazard conditions have been observed 'outside the peak season'. However, I could not observe anything 'abnormal' about this. Fact remains, we were caught with 'our pants down' in these areas, whether we like it not, that is the truth.

I could not help reading about a recent "wildfire risk assessment" conducted in the Northern Cape, and the presenter then came to the conclusion that this province "had indeed the lowest wildfire risk" in the country. This may be true for the 'average years', but this is very far from reality during eg 2012. Where have we been missing the boat? In another recent article I have been reading "how the risk was reduced through integrated fire management in the Free State and the Northern Cape". We now realise that the opposite is indeed true!

What beats me, is that nothing (or at least very little) was indeed published to date about the fact that "2012 was in these provinces a year which exceeded most records" with regard to wildfire size and damage impact in both provinces and that this was experienced in the driest (safest??) regions of both provinces in particular. Why do we suddenly experience in these regions the worst wildfires in South Africa?▶

Without pointing any fingers at individuals or organisations, I hope that we can at least admit that we might have to rethink our risk assessment technology and learn from our mistakes. I hope we do not have a reoccurrence of allowing this terrible seasons' experience to happen in our 'safe' regions again and admit that we might have it wrong somewhere along the line this time around.

The Free State: dry and wet region fuel dynamics

Most of us might have noted that the eastern part of this province is on average a generally higher yearly rainfall area than is recorded in the western section of this province and that this is why the first is also experiencing a more regular wildfire occurrence. Makes sense doesn't it? The higher the average rainfall, the faster the yearly grassland biomass addition will accumulate and subsequently the earlier exposure to wildfire damage will occur (or burning rotation if you like) after grassland curing. However, I have observed that it may take longer in the west to reach 'burnable biomass levels', but then this stuff burn terribly once reaching such loading levels! This might take 12 to 15 years to materialise (own observations), but can then still take everyone by surprise. Should it not be the duty of the responsible authorities to monitor (and identify) such dangerous probabilities and to warn all about such dangerous fuel loading levels developing, particularly the authorities responsible for attending to such problem areas by means of prescribed burning application?

Without going into technical detail, the key to assessing fire hazard levels in these grasslands realistically, is to wait until curing of the grassland is complete and then to map these hazards on regional maps from a suitable (regional) fuel model base onto satellite images and in this manner to arrive at 'a map of hot-spots' to identify such hazard areas. Then the fire prevention managers can concentrate their efforts on these problem areas before the fire season sets in, in earnest. Believe me, this is where our "risk assessors" have been missing the boat, they are ignoring the most drastic changes taking place in the landscape completely. Without a proper regional fuel base being used, no one has any idea of fire hazard levels and will subsequently miss out on realistic assessments completely. Do not tell me that this is realistically not possible, because the technology required for this is readily available for this purpose (if still lost, by all means contact me!)

The Northern Cape: the important role of bush encroachment

In recent assessments of fuel dynamics in this region, it soon became evident to me that the Kalahari Desert and surrounds are still mostly covered by dry savannah grassland with a typical tree component, particularly in the sandy areas. In contrast, the Kalahari Harde Veld and Bushveld have another threatening problem: bush encroachment. I will refrain from explaining what impact this problem has on the availability of grazing land but rather concentrate on the contrasts observed on fire hazard in this region, which can mostly be directly linked to the degree of infestation of these shrubs. Ask the farming communities in this region. They know exactly what I am talking about!

To understand the impact these shrubland fuels have on fire behaviour, one only needs to observe a fire moving through such grassland where a significant shrub cover occurs. The grassland might only produce a low fire intensity with a surface fire line barely just moving during dry, windy, conditions. In contrast, right next to such grassland, a fire in the bush can 'explode' into high flare ups, reaching above five metres in height or more, with a high residence time* (thus subsequently with a high smouldering potential) as well as high spotting probability. Dry substances from such bushes, particularly dry seed pods from Vaalbos, can easily produce burning embers that can easily bridge any firebreak up to or even exceeding 100 metres wide, even continuing to burn the bushes with high intensities right through the night. Simultaneously, the grasses on the same land will most probably extinguish by itself when the evening sets in.

Now, why should I explain these vegetation types in such detail at all? So what has this to do with fire hazard/risk? No proper fire hazard/risk assessment can be conducted in the region without a representative fuel model base being used, providing the main fuel contrasts in terms of predicted wildfire behaviour. I think this example explains why any risk assessment methods without such a fuel model base, will simply not work in this region and why, in a single wildfire, more than 100 000 hectare can be burned over, seriously damaging more than 50 farms!

The solutions to the problems

First of all, I think we should realise that the fire problems in both provinces are indeed showing contrasting variations between both regions, in terms of (i) vegetation and fuel dynamics, (ii) fire hazard and risk occurrence, and (iii) solutions available. To assess each situation properly, I think it is extremely important to consult with the land owners first (through eg agricultural organisations, nature conservation bodies and local governments) as these are the first people in the 'fire line'. It is particularly the farmers that have a lot more experience on the subject (and are taking the brunt of the damage) than might be realised by the authorities. I certainly learned a lot from them during the past few years and without their cooperation, any concerted action with regard to fire hazard/risk improvement will simply fail.

The Department of Agriculture, Forestry and Fisheries (DAFF) should take the initiative in this respect, supported by organisations such as provincial and local governments, Working on Fire, local fire and rescue authorities and other role players. Such drives and related action programs should be funded properly as a matter of urgency without delay, because yearly we are losing billions of Rands in wildfire damage and something constructively should be done about that right now. That is the bottom line.

I know that I have pleaded for such action before and I will not stop doing so as long as I see this problem growing because it is not properly attended to. How long do I still have to be a 'lonely voice in the wilderness'?

Are we winning? I leave it to the readers to answer that question.

Field demonstration of spiral multiple ignition technology using a Bell 206 helicopter

Fire prevention focus

at the Grassland Society conference

The Grassland Society of South Africa's 48th Annual Congress, hosted in a different province in South Africa each year, was held at the Weesgerus Holiday Resort Conference Centre in Limpopo from 15 to 19 July this year.

'Advancing rangeland ecology and pasture management in Africa' was the theme of this year's congress, which hosted presentations of current and ongoing research related to the subject.

Dr Winston Trollope

Fire management in South Africa: policy and practice was the opening day theme of the conference, featuring discussions led by seasoned experts in varying fields. This included presentations by prominent fire ecologist with the FFA Group, Dr Winston Trollope, on 'Prescribed burning in African grasslands and savannahs' and attorney, Jean du Plessis, who discussed the legal implication of the new FDI system and the preparation of landowners for litigation.

Council for Scientific and Industrial Research (CSIR) remote sensing specialist, Dr Philip Frost, provided insight into the latest developments in satellite imagery for prescribed burning. FFA Group co-managing director, Chris de Bruno Austin, discussed the essential structures for compliance with the National Veld and Forest Fire Act 1998. Austin also provided a field demonstration for spiral multiple ignition technology for prescribed burning practices.

A presentation on 'Post-fire veld management' was made by, Professor Kevin Kirkman, who is based at the University of KwaZulu-Natal. Fire ecologist with FFA, Lynne Trollope, provided insight into the 'Essential factors in prescribed burning'.

Fire management in South Africa:

Prescribed burning in African grasslands and savannahs

Dr Winston Trollope stated that fire management is an essential practice in the Eastern Cape for veld and wildlife management.

Dr Trollope stated that prescribed burning is an important management practice in domestic farming operations, with veld condition or the ecological structure of a veld being the key factors to consider in prescribed burning. "The results of using ecological criteria for prescribed burning are that wildlife population increases over time," said Dr Trollope. "There is practical viability of doing prescribed burning using fire ecology," he concluded.

Dr Trollope said that the primary objective of this practice is to maintain production and viability of natural veld ecosystem and also to maintain biodiversity.

Dr Trollope explained that the removal of moribund or unacceptable veld conditions, as well as controlling the encroachment of undesirable plants were the primary reasons for prescribed burning.▸

The ideal seasons for conducting prescribed burning is the dormant stages of grass growth that is during the winter and early spring periods, explained Dr Trollope. He noted that burning should only be considered when the grass sward is in excellent condition and in a climax stage.

Dr Trollope advised against the use of fire to 'stimulate out-of-season green bite' or green feed as practised by many farmers. This practice saves farmers the cost of buying feed in the short term, but does long-term damage to the veld, explained Dr Trollope. Landowners and managers were advised to maintain rotational resting programmes after prescribed burning.

Dr Trollope highlighted the use of the fire danger index (FDI) for controlled burned, in order to ensure that the correct fire intensity is activated, stating that the decision to conduct burning is enhanced by using the FDI system.

Legal implication of new FDI system

Attorney Jean du Plessis discussed the litigation planning process of landowner and stating that 'if you don't have to litigate don't', adding that landowners should 'do what is necessary to ensure success'.

Du Plessis mentioned that litigation is all about keeping records. He stated the importance of recording high fire-risk neighbours, taking photos of processes and equipment and building a formidable record. "The bigger the entity the more sophisticated the fire plan," he said.

Du Plessis mentioned that record keeping includes making notes of all parties arriving at the fire and that a log should be kept of the events as they occur, including first responders and first aerial call to the fire.

Attorney Jean du Plessis

There are four phases in the litigation planning process as discussed by Du Plessis.

Phase 1: Fire plan

- This should indicate a plan in the event of a fire
- The plan should indicated a line of communication
- It should have a list of available fire equipment
- The plan should list the number of firefighters
- It should list high risk areas
- The plan should also list the names and numbers of neighbours

Phase 2: Before fire season planning

- Prepare fire breaks
- Conduct fire fighter training
- Ensure you have a calibrated weather station system
- Establish a line of communication

Phase 3: During the fire

- As fire occurs, keep building a fire record
- Implement a fire plan
- Employees react as per fire plan
- The reaction time to fire is essential

Phase 4: After the fire

- Keep records of the fire plan that was put in place to contain, extinguish and prevent the spread of the fire
- Gather all information ie photos, video, chronological reports and record all the individuals involved in the fire
- Obtain the services of a fire expert
- Obtain the services of an attorney and ask for analysis of info to establish legal perspective

Satellite imagery for prescribed burning

CSIR senior scientist, Dr Philip Frost, led the development of an advanced fire information system (AFIS), which processes satellite data and provides near real-time alerts of fires and burned areas for use by disaster managers, firefighters, farmers and forest managers.

Dr Frost discussed the latest developments in the AFIS system, which power utility, Eskom, implemented in 2003 to mitigate the risks that wildfires posed on its power lines.

"AFIS was developed over the last eight or so years," explained Dr Frost. "When we met with Eskom in 2003,

Dr Philip Frost

we used satellite data to detect 2 300 fires that posed a threat to power lines by using the AFIS system that maps coordinates of fires."

Dr Frost made reference to the fires at the Sondela Nature Reserve in Limpopo on 1 September 2012 that caused extensive damage to property, as well as the loss of wildlife. This incident highlighted 'the value of fire detection', stated Dr Frost.

Key features of the AFIS system:

- Near real-time fire detection
- Provides access to 11 years of historical information on fires
- Mobile phones application provides crucial alerts and reports
- Employs a fire incident reporting tool
- Mobile AFIS app for smart phones

AFIS mobile application:

- Provides five-day fire danger forecasts for southern African region
- Fire reports ie last burn and fire frequency
- Provides map of all fires within a certain radius of one location

Compliance with the National Veld and Forest Fire Act 101 of 1998

Working on Fire International CEO, Chris de Bruno Austin, interpreted the application of the National Veld and Forest Fire Act 101 of 1998 (the Act), pertaining to landowners in environment areas.

Austin discussed the role of fire protection associations (FPAs) in fire management practise as outlined in the Act, saying that the FPAs are 'formed by landowners who feel that they need these groups'.

"The idea of the act was to not have two different regulations under one FPAs jurisdiction area," stated Austin.

Chris de Bruno Austin

Kevin Kirkman

Lynne Trollope

▶He mentioned that municipalities falling within the area of an FPA have to join the association."

A fire protection officer (FPO) has to be selected by the FPA, as per the requirements of the Act, stated Austin. "The FPO has power, in terms of the Act, to implement the Act and do search and seizure," he explained. "The FPA has to perform a function for the benefit of landowners."

FPA key functions:

- Develop a wildfire management strategy for its area
- Formulate a system and rules that bind its members
- Supply the Minister of Environmental Affairs with statistics about wildfire management
- FPA will assist landowners in firefighter training and ensure that the training provided is accredited (as small landowners do not know where to access training)

"An FPA is not a fire fighting organisation," instructed Austin. He said that fire awareness activities should be the focus of an FPA and an area where it should be 'spending money'.

Fire and sourveld management

University of KwaZulu-Natal head of Grassland Science, Professor Kevin Kirkman, discussed the use of fire in the management of livestock and sourveld, the latter being termed as forage plants that become unacceptable and less nutritious and suited to grazing in certain periods of the year.

Fire management in livestock and sourveld:

- Fire can be used to remove residual material
- Improve performance of livestock
- Promotes non-selective grazing
- Maintains species composition
- Spreads grazing pressure to include unpalatable species
- Manage shrub and bush encroachment

Kirkman explained the uses of fire in animal grazing strategies of landowners and farmer's. "After a fire animal performance is better, because the quality of grass is high - as nutrient quality is improved."

The fire requirements for sourveld and livestock should taking into account frequency, timing, behaviour and shrub and bush control. The time for removal of residue and identifying the extent of the area requiring fire is key in fire management practices, explained Kirkman.

"Fire management should be based on active decision making process. Managed fire is preferred to unmanaged fire," said Kirkman. "Fire can be used to influence animal performance and movement."

Kirkman explained that fire can assist in making unpalatable grass palatable within a set period of time and that a full summer rest is necessary to restore the vigour of the grass. "Grass that is not grazed has a huge increase in vigour against grass that is not grazed."

Essential factors in prescribed burning

FFA fire ecologist, Lynne Trollope, stated that veld condition assessments is an essential part of prescribed burning, along with the use of a disc pasture meter and the application of the FDI.

"Assessments of veld condition is an integral component of prescribed burning," said Trollope. "Based on analysis of data collected and fed into a decision reports system, landowners and managers can make informed decisions on whether to apply prescribed burning."

Trollope explained that the decision support system in conducting prescribed burning should be based on ecology of grass sward, fuel load, annual rainfall and fire history.

Fire management is also strongly influenced by FDI and the prevailing weather condition and fuel layer, said Trollope. She mentioned that the FDI system being widely used in South Africa is a system developed by Johan and Lizette Heine of the then Lowveld Fire Protection Association, mentioned Trollope. She explained that the FDI for prescribed burning is presented on the fire danger chart, adding that the five colour-coded categories of the FDI namely, blue, green, yellow, orange and red in order from low risk to high risk, indicates the severity of fire danger.

Trollope advocated the use of concentrated public awareness campaigns on fire danger relative to the prevailing weather conditions, which should be spearheaded by FPAs. "If this is undertaken, the threat of fires can be greatly reduced," she said.

Trollope also promoted the use of the disc pasture meter as a viable tool to 'estimate grass biomass for management purposes' in prescribed burning exercises. "It is an easy, practical and a reliable system," she concluded.

The Grassland Society's annual congress proved to be a highly informative and engaging event that benefited landowners and other fire industry practitioners. Many key stakeholders and other roleplayers attended the week-long event, that is sure to be a perennial feature in the diaries of local land managers.

Cutting edge fire and security technology showcased at IFSEC exhibition

Prominent commercial security, homeland security and fire exhibition, IFSEC South Africa, successfully staged its annual event at the Gallagher Convention Centre in Midrand, South Africa from 18 to 20 June, this year.

IFSEC South Africa 2013 hosted various companies primarily featuring a host of technology enterprises in the security industry, but also featured an array of fire and occupation health and safety organisations (OHS) who showcased their respective systems and products. "Preliminary feedback from both exhibitors and visitors has been positive," said UBM Montgomery event director, Charlene Hefer.

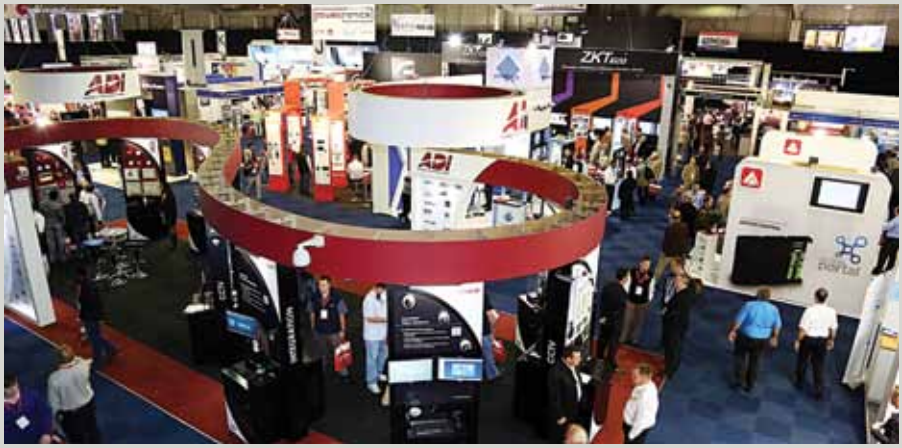
IFSEC South Africa was co-located with OSH EXPO Africa, one of the fastest growing occupational safety and health events in Africa, reports UBM Montgomery. "We are delighted with the continuous growth of IFSEC SA and OSH EXPO Africa," stated Hefer. "Our team has worked hard to offer a world-class show that not only draws a growing number of visitors, but ensures that all of our exhibitors experience maximum return on their marketing investment."

IFSEC South Africa 2013 introduced the latest and progressive technologies, while giving visitors strategic networking opportunities and the event this year included a solid educational component in the form of its various seminar theatres, stated UBM Montgomery.

Seminars

From wireless fire detection to the latest CCTV trends in Africa and around the world, the IFSEC South Africa 2013 seminar theatre covered the widest range of topics affecting today's security and fire protection professionals.

The speakers at the IFSEC seminar theatre included Fire and Security Systems head of marketing for emergency management services (EMS), Ray Puttock, who provided an overview of current technology and product innovations from Fire and Security Systems' wireless fire detection systems.



Fire, OHS and security technology was on the agenda at IFSEC South Africa 2013

Puttock stated the types of wireless fire detection systems provided to organisations depend on risk assessment. A fast track and low cost installation count among the benefits of installing wireless fire detection systems, stated Puttock.

He said that in the installation process, business continuity is maintained owing to quick installation and there is no risk or damage to building materials or fabric. Also, existing cable infrastructure and building integrity is not compromised.

Radio cluster communicator system technology is used by Fire and Security Systems in its wireless fire detection system, explained Puttock. The typical applications for wireless systems are scenarios where installing a fire detection system in a building is difficult, at a sensitive site and to achieve mobility of the system, concluded Puttock.

Fire protection Association of South Africa (FPASA) spokesperson, Bevan Wolf, discussed the necessity of fire risk assessment in large informal communities, as well as the construction industry, which has been largely inadequate. Wolf opined that 'public liability exposure needs to become a priority in South Africa'.

Pertaining to the construction industry, Wolf said, "Site safety personnel are trained comprehensively in OHSA requirements, yet have limited or no knowledge regarding protective systems.

"Fire risk assessments are not conducted by competent professionals," stated Wolf. "Regular fire assessments need to be done by competent people at construction sites."

Wolf implored that fire risk assessment is a specialised function and needs to be presented as a specialised field of expertise. He said that appropriate ▸

Bevan Wolf

Ray Puttock

IFSEC exhibition

showcased innovative fire and security technology

IFSEC 2013 and the OSH Expo featured various fire systems and security technology manufacturers, who showcased an array of cutting edge technologies in these respective industries at the Gallagher Convention Centre in Johannesburg, South Africa. More than 200 exhibitors had an opportunity to promote their brands and gain leads and sales from the 6 696 visitors that attended the three-day exhibition hosted by UBM Montgomery from 18 to 20 June. IFSEC reported that 19 African countries visited the event and more than 250 international visitors attending the exhibition. A total of 213 exhibitors showcased a range of products that included fire detection systems and CCTV technology corporations.

Telecommunications company, Instacom's buoyant sales team

Fire and Rescue International hosted its own stand at IFSEC 2013

Imperial Armour MD, Louisa Garland-Els, flanked by product models

Skills Resource Group management team, Dalwyn Diesel-Reynolds, Delene Sheasby and Malcolm Feldman

qualification and training is required from bodies like the South Africa Qualifications Authority (SAQA), in order to adequately perform the tasks required for fire risk assessments.

Exhibition

IFSEC South Africa 2013 saw a range of prominent industry brands taking up elaborate stands to showcase their products and including security organisations like Elvey Security Technologies, Ideco, Reditron, Hikvision, ADI Global Distribution and Bruker International. Hefer believes the event was the ideal platform for visitors to compare products and make informed decisions about the best security solutions on offer.

With more than 200 exhibitors highlighting and promoting their brands, UBM Montgomery states that some companies have already reported a breakthrough number of leads and sales from this event.

Visitors were able to witness demonstrations of some of the most innovative products in security today including close circuit television (CCTV) technology, remote monitoring, fire protection, access control, intruder alarms, perimeter protection, biometrics, guarding, counter terror, firearms and protective clothing.

"We're proud of the achievements at this year's show," said Hefer. "We achieved our objectives and overall it was an excellent platform for security trade professionals, organisation risk managers, senior decision-makers and government representatives to engage with respected commercial and government security suppliers."

"It's become clear to us that our continued investment in both IFSEC South Africa and OSH EXPO Africa, to position them as global events is paying dividends and the local market is demanding more of the same," says Hefer. "Plans are already in full swing for IFSEC South Africa 2014, taking place from 13 to 15 May 2014," she concluded.

Zonke Engineering's Riaan van der Walt and David Rothballer

Drive Report's, Dave van Tonder and Stuart Blackstock

H and S Group's, Belinda Fivaz, with its IFSEC 2013 stand models

Pheonix Health and Safety sales executives hold up a copy of Fire and Rescue International magazine

Dromex management team, Stel Stylianou, CEO and Manoli Stylianou, general manager

The striking sales assistants of hearing protection and conservation company, Impact Noise Protection

3M's management team

CCTV and security products manufacturer, MAMI's, sales team

Lemaitre safety footwear's sales representatives

2013

August

17 – 18 August 2013
ATA International Advanced Cardiovascular Life Support (ACLS)
Candidates will be competent to recognise and initiate the management of cardiac arrest conditions
Venue: Mia's Nest Guest Lodge, Midrand
Contact: Gugulethu More Tel: 011 450 4981
email: gugulethu.more@ata-international.com

18 – 21 August 2013
APCO Internationals' 79th Annual Conference and Expo
APCO 2013 is the largest gathering of the public safety communications community of its kind showcasing new products, equipment and technologies
Venue: Anaheim, California, USA
For more information visit: www.apco2013.org

19 – 23 August 2013
Rural Metro Emergency Management Services Level III First Aid Course
This comprehensive course covers everything from describing first aid equipment and explaining their basic application to intervening in minor medical emergencies and carrying out CPR
Venue: Greytown Training Academy, Greytown, KwaZulu-Natal, South Africa
Contact: Germaine Gilbert Tel: 033 345 0080
email: GermaineG@ruralmetrosa.com
For more information visit:
www.ruralmetrosa.com

19 – 23 August 2013
Confederation of Fire Protection Association's (CFPA) fire prevention and safety strategies
Content fully revised in 2011, now covers the theory of fire, legislation, components/operation/use of extinguishers, flammable liquids and gases, hot work, fire hazards of electrical equipment/installations, components/operation/site control of sprinklers and automatic fire detection systems, the organisation and management of fire teams and occupational fire brigades
Venue: 105 Springbok Road, Bartlett, Boksburg, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618/9
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

19 – 23 August 2013
Rural Metro Emergency Management Services Fire Instructor I Course
This comprehensive course, the fire instructor I program consists of 13 sections of which five weeks require self-study and thereafter it consists of theory and practical simulations, exercises and case studies
Venue: Greytown Training Academy, Greytown, KwaZulu-Natal, South Africa
Contact: Germaine Gilbert Tel: 033 345 0080
email: GermaineG@ruralmetrosa.com
For more information visit:
www.ruralmetrosa.com

21 – 23 August 2013
2nd International Conference on Biodefense and Natural Disasters
This is a unique event, which forms a network with leading academic scientists, researchers, industry professionals and colleagues from many countries who share the same goals. Innovative ideas will provided to take initiatives to find better solutions to reduce future risks and threats of disasters.
Venue: Orlando, Florida, USA
For more information visit:
www.omicsgroup.com/conferences/

21 – 23 August 2013
ATA International 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: Mia's Nest Guest Lodge, Midrand
Contact: Gugulethu More Tel: 011 450 4981
email: gugulethu.more@ata-international.com

24 – 28 August 2013
5th International Disaster and Risk Conference IDRC Davos 2014
IDRC Davos 2014 will again gather participants including risk management experts, practitioners, scientists, and key players from civil society, Non-Governmental Organisations and the private sector. The diversity of participants enables both a strategic and operational level of discussion to ensure "the last mile" will be considered with key players from line ministries and disaster and risk management authorities
Venue: International Conference Centre, Davos, Switzerland
For more information visit: www.idrc.info/

26 August 2013
ATA International Airway Management (AWM)
Airway Management is a unique program designed to give students the chance to learn, practice and demonstrate their ability in applying many airway skills used in resuscitation. Students increase their awareness of various airway products and skills required
Venue: To be confirmed
Contact: Gugulethu More Tel: 011 450 4981
email: Gugulethu.more@ata-international.com

26 August 2013
FPASA basic fire fighting module
The basic theory of fire, methods of extinguishment, components, operations and practical use of fire extinguishers and hose reels. This is a suitable annual continuation or refresher training for persons who have attended the fire fighting and evacuation module
Venue: 105 Springbok Road, Bartlett, Boksburg, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618/9
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

26 August – 25 October 2013
Rural Metro Emergency Management Services Fire Fighter I Course
This is a comprehensive course which covers everything from fire fighter orientation and safety, fire behaviour,building construction,buiding search and rescue to public fire and life safety to fire department communications.
Venue: Greytown Training Academy
Contact: Germaine Gilbert Tel: 033 345 0080
email: GermaineG@ruralmetrosa.com
For more information visit:
www.ruralmetrosa.com

27 August 2013
ATA International ECG and pharmacology
The basic ECG and pharmacology courses provides a systematic approach to the recognition and emergency management of bradycardias, tachycardias, supraventricular and ventricular arrhythmias, atrioventricular blocks, pacing, pacemakers and synchronised cardioversion
Venue: To be confirmed
Contact: Gugulethu More Tel: 011 450 4981
email: Gugulethu.more@ata-international.com

28 August 2013
Emergency Care Training Basic Life Support for Healthcare Providers' Course
This course is intended for participants who provide health care to patients in a wide variety of settings. The course teaches the skills of CPR and choking for victims of all ages, including ventilation with barrier devices, pocket masks, bag-valve-mask devices with supplemental oxygen and the use of automated external defibrillators
Venue: 16 Lotus Street, Roodepoort, South Africa
Contact: Heather Roestorff
email: heather@emergency-care.co.za
For further information visit:
www.emergency-care.co.za

30 August 2013
Life Med: ethics course
This course is developed to update/refresh legal and ethical issues for all health care professionals and is a vital element of the ambulance practitioner's daily life. Ethics human rights and medical law points awarded
Venue: Life Med Ambulance Services c/o Michael Brink (Nico Smith) and 19th Avenue Villieria, Pretoria, South Africa
Contact: Charmaine Oosthuizen
Tel: 012 330 9413 or
email: training@lifemed911.co.za
For more information visit:
www.lifemed911.co.za

30 – 31 August 2013
Cape Town Open Invitational Challenge – Toughest Fire Fighter Alive
Venue: Good Hope Centre
Contact: Liezel Moodie or Sharon Bosch
Tel: 021 444 0287/8 or
email: Liezl.Moodie@capetown.gov.za
or Sharon.Bosch@capetown.gov.za

September

2 September 2013
FPASA South African Qualification and Certification Committee
This is an assessment session only
Venue: 105 Springbok Road, Bartlett, Boksburg, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618/9,
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

2 – 5 September 2013
2013 AFAC and Bushfire CRC Conference: Shaping Tomorrow Together
This theme reflects that emergency services will need to work together collaboratively with the community and other partners from the education, health, business and research sectors, and all levels of government, to shape our future
Venue: Melbourne, Australia
For more information visit: www.afac2013.org

2 – 13 September 2013
FPASA Advanced Fire Prevention Course
Content fully revised in 2011, now addresses fire risk management, fire safety legislation, suppression system, fire growth and development, means of escape, flammable liquids and gases, structural protection, business continuity and fire safety management
Venue: Durban, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618/9
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

8 – 12 September 2013
25th EMS World Expo
With the advent of the Affordable Care Act, comprehensive change is coming to healthcare in the United States. The role of EMS providers is among those poised to undergo the greatest evolutions. At EMS World Expo's first Mobile Integrated Healthcare Summit, top experts and cutting-edge content come together to help agencies navigate this radical new environment along with wonderful exhibits
Venue: Las Vegas Convention Centre, Las Vegas, USA
For more information visit:
emsworldexpo.com/conference.php

9 – 11 September 2013
ATA International 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: Mia's Nest Guest Lodge
Contact: Gugulethu More Tel: 011 450 4981
email: gugulethu.more@ata-international.com

9 – 13 September 2013
Illinois Chapter of The International Association of Arson Investigators Seminar
30th Annual Training Conference
This year's scheduled line-up for the Annual Conference includes the following topics; presentation from the Illinois State Police Crime lab; ATF presentation on 9/11 evidence collection; NFPA 1033 and how it affects the job we do; explosives recognition; street gangs: identification, trends, and investigator safety and case study on a fatal hotel fire from first responders to prosecution
Venue: Hawthorne Suites, Champaign, Illinois, USA
Contact: Tom Wegner Tel: 00 708 774 9741 or Chris Ward Tel: 00 815 405 5491

11 September 2013
South African Emergency Care (SAEC) 9/11 Memorial service
A memorial service in honour of and to remember the fallen heroes of 9/11
Venue: South African Emergency Care (SAEC) 1 Ardeer Road, Modderfontein Kempton Park, Gauteng, South Africa
Contact: Chantal Struwig Tel 011 608 0972 or
email chantal@saecare.co.za

11 September 2013
FPASA fire fighting evacuation training
Basic theory and practical exercises for the use of portable fire extinguishers and hose-reels on incipient stage fires, duties and responsibilities of fire marshals during an emergency and practical evacuation exercise
Venue: 105 Springbok Road, Bartlett, Boksburg, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618/9
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

11 – 13 September 2013
IFSEC Southeast Asia 2013
Created from the leading regional events ISF and FIREC provides visitors with the opportunity to network, source new products and hear the latest issues and developments from the industry. This year, the event will play host to the most renowned security and fire organisations in ASEAN (Association of Southeast Asian Nations)
Venue: Kuala Lumpur Convention Centre, Malaysia
For more information visit: www.ifsecsea.com

11 – 12 September 2013
28th DMISA Conference: Making Cities Resilient
This campaign addresses issues of local governance and urban risk while drawing upon previous ISDR campaigns on safer schools and hospitals, as well as on the sustainable urbanisations principles developed in the UN-Habitat World Urban Campaign 2009-2013
Venue: President Hotel, Bloemfontein, Free State Province, South Africa
Contact: Erika Swart
email: erikaswart@mweb.co.za.
For more information visit: www.disaster.co.za

12 – 13 September 2013
South African Emergency Care (SAEC) fire fighter/rescue challenge
The objective of the challenge can be seen as a "refresher" and "skills training" course for the fire fighting teams, allowing professionals and corporate companies to interact and compete against each other for trophies and prizes
Venue: South African Emergency Care (SAEC) 1 Ardeer Road, Modderfontein Kempton Park, Gauteng, South Africa
Contact: Chantal Struwig Tel 011 608 0972 or email chantal@saecare.co.za

13 September 2013
ATA International 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: Mia's Nest Guest Lodge
Contact: Gugulethu More Tel: 011 450 4981
email: gugulethu.more@ata-international.com

13 – 14 September 2013
New Jersey fire expo
The Five Mile Beach Volunteer Firemen's Association is proud to present for the twenty-seventh year in the Wildwood's the NJ Fire Expo. This Exposition of fire equipment and vendors of fire related products is often described as the largest exposition of its kind East of the Mississippi. Fire Apparatus purchasers come from entire Mid-Atlantic region to view and purchase equipment.
Venue: Wildwood, New Jersey, USA
For more information visit: www.njfireexpo.com/

14 – 15 September 2013
ATA International Advanced Cardiovascular Life Support (ACLS)
Candidates will be competent to recognise and initiate the management of cardiac arrest and peri-arrest conditions
Venue: Mia's Nest Guest Lodge
Contact: Gugulethu More Tel: 011 450 4981
email: gugulethu.more@ata-international.com

15 – 19 September 2013
22nd International Grasslands Congress: Revitalising Grasslands to Sustain our Communities
The congress aims to present a program which is participative, innovative, stimulating, thought-provoking and enriching by offering networking and learning opportunities to new and experienced, grassland scientists, extension workers, postgraduate students and some undergraduate students, agri-business professionals, policy makers and leading livestock producers and farmers from all over the world
Venue: Sydney Convention and Exhibition Centre, Darling Drive, Darling Harbour, New South Wales, Australia
For more information visit:
igc2013.com/pages/home.php

16 – 20 September 2013
Confederation of Fire Protection Association's (CFPA): certificate in principles of fire safety engineering course
The course covers the application of fire safety engineering principles to the design of buildings
Venue: Durban, TBC
Contact: Christine van der Westhuizen
Tel: 011 397 1618
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

16 – 20 September 2013
FPASA Fundamentals of fire investigation
Most advanced programme of its type. This course promotes a clear understanding of fire investigation and the rendering of opinion regarding origin and cause. This includes practical investigation exercises and is now aligned with NFPA 921.
Venue: 105 Springbok Road, Bartlett, Boksburg, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618/9
email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

17 – 18 September 2013
Intermediate Life Support (ILS) refresher/update course
A course aimed at all intermediate life support health care professionals. Developed to update/refresh all skills and ILS protocols as according to the health professions council of South Africa. CPD points will be awarded.
Venue: Life Med Ambulance Services c/o Michael Brink (Nico Smith) and 19th Avenue Villieria, Pretoria, South Africa
Contact: Charmaine Oosthuizen
Tel: 012 330 9413 or
email: training@lifemed911.co.za
For more information visit:
www.lifemed911.co.za

18 – 19 September 2013
Basic Life Support Instructor Course (BLS 1)
All instructors must have a valid BLS Instructor Certificate, and have a firm, working knowledge of the training materials, including textbook and certificates to be issued for each specific Course. All examination material must be kept under strict lock and key at all times
Venue: Mia's Nest Guest Lodge
Contact: Gugulethu More Tel: 011 450 4981
email: gugulethu.more@ata-international.com

When Brave Men Cry

Into the bowels of hell, these brave ones go
To save the lives of those they do not know
Guided by training and camaraderie
while overcoming fear
They dare to go with only guardian angels near

Through the smoke and heat and gasses too
They fight their fears when looking for you
A life to save is their primary task
Think of them with kindness is all they ask

The Cross of Malta is their chosen crest
Love of another is the required test
First to respond when all spells gloom
They won't quit though it could be their own doom

These fire fighters have seen so much
Burned and broken bodies, death, destruction and such
They go back for more each and every day
Because it's the lives they save that makes them stay

All for one and one for all
You go - I go that is their call
And in their quest, when some do fall
The rest stand strong - still giving their all

The loss of a family member does take its toll
Cuts to the quick, down deep in your soul
Heroes forever, when they die
And that is when 'brave men cry'.

Author: Thomas L Hart, Chaplain
Cut-N-Shoot Volunteer Fire Department
Retired Detroit fire fighter

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