FIRE AND RESCUE INTERNATIONAL

Integrated fire, rescue, EMS and incident command technology

Volume 3 No 5

www.wrescue.org

As outbreaks of wildland fire are increasing due to global change, ecological disturbance and damage to local communities become serious. The conference provides a platform for 3,000 fire management experts and business officials to discuss fire management strategy and to share business opportunities.

The 6th International Wildland Fire Conference

12-16 October 2015
PyeongChang, Korea

Host city of the 2018 Pyeongchang Olympic Winter Games!

Theme **Fire of the Past, Fire in Future**
Registration at www.wildfire2015.kr

Sessions

- Plenary sessions
- Keynote lectures
- Parallel sessions
- Regional sessions
- Side-events
- Field study tour

Plenary Topics

- Legacy of fire
- Community and wildland fire
- Towards a cohesive global fire management strategy
- Application of technology to wildland fire management
- Protecting the global natural and cultural heritage from fire

Exhibition

- Wildland fire apparatus
- Aerial firefighting equipments
- Fire suppression instruments
- Protective gear
- Aircraft navigation system
- Fire surveillance cameras
- Fire danger forecast system
- Fire situation control system
- Fire dissemination forecast system

Participants Registration

Registration begins 1 September 2014. Payment can be done by major credit cards and wire/bank transfer after online registration.

Full Registration Fees

- **Regular/On-Site:** USD 550
- **Pre-registration:** USD 495 (10% discount, 1 March-31 Aug. 2015)
- **Early-Bird:** USD 440 (20% discount, 1 Sept. 2014-28 Feb. 2015)
- **Students:** USD 280

Exhibition Registration

- **Shell Scheme Construction:** USD 2,500
- **Raw Space:** USD 2,250/9m^2
  (Available for more than 18m^2)

* **Early-Bird Discount Rate:** 10%
(by 28 February 2015)

Host

KOREA FOREST SERVICE

Gangwon Province

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Contents

FIRE AND RESCUE INTERNATIONAL

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Comment

Lee Raath-Brownie

Proudly presenting the 29th edition of Fire and Rescue International (FRI), which disseminates the latest news, useful and informative articles, practical know-how and reference material.

Cover profile
Our front cover features the World Rescue Organisation (WRO) headquartered in the UK and we highlight its core functions. The WRO relates emergency rescue and medical techniques, practices and procedures, aiding the effective management of road traffic collisions and the care of those involved.

News section
This month's news section is dominated by the recent floods and subsequent disaster and humanitarian response by several South African entities. New fire apparatus and water rescue gear acquired by the City of Cape Town Fire and Rescue Service together with several high profile incidents around South Africa also features prominently. These include the major wildfire at Hawston in the Overstrand, various motor vehicle accidents, a multi-agency rescue on the Western Cape coastline, a unique suppression of a restaurant fire in the Overberg and the recently launched European innovative e-learning project, preparing the public for natural disasters.

Aerial apparatus
The placement and operation of aerial apparatus' at structural fires forms the focus of Colin Deiner's article in this issue. Deiner details the various tactical fire ground applications executed using aerial platforms and he discusses the issues as well as new innovations pertaining to these versatile devices.

Fie service
FRI visited Rustenburg Fire Department and we showcase this expertly run service, review it history, main challenges and highlights it successes. We also profile its CFO, Ephraim Mfolwe and share his career history with our readers.

Incident command
Reinard Geldenhuys demystifies incident types and discusses the implementation of a standardised incident classification system by the South African Incident Command System Workgroup.

Rescue roundup
New to our monthly line up of articles is the Rescue roundup column written by Neville van Rensburg and Julius Fleishman. Practical discussion of various rescue scenarios will be brought to you by these specialists in the field. Let us have your views regarding this new feature!

Obituaries
We honour two fallen heroes, Ben van der Linde and Piet Roos. Rest in peace, Brothers, we'll take it from here.

Leadership
USA-based Wayne Bailey discusses fire fighter retention and how today's leaders can connect with their staff.

Education
Teaching with technology is written by Schalk-Willem van der Merwe who unpacks the latest technological advancements that are used in the learning arena.

Fire protection association
We profile Bethlehem FPA in the Free State Province and look at its risk profile, resources area of operation and mitigation strategies.

Wildfire management
Malcolm Procter discusses the issues around building resilience against wildfires in rural areas and highlights the importance of cooperation and planning.

Heritage
We researched the historic past of Saint Florian and how he became the patron Saint of fire fighters.

We trust you will enjoy reading this issue as much as we enjoyed writing it. Fire and Rescue International is your magazine. Read it, use it and share it!

Lee Raath-Brownie
Publisher

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R480 per annum

International (airmail)
R680 per annum

Proudly serving those who serve

This month's FRI images winner!

Congratulations to

Bruce Sutherland for his photograph 'Car alight on N2 outgoing' taken with a Nikon D 4, ISO-50, a shutter speed of 1/3200 of a second' ISO 1250 and an aperture 3.2 F-stop.

Well done!

Photo description:
On a Friday evening nearing the end of November 2014, a BMW speeding on the N2 outboard hit the median barrier and burst into flames. The driver was thrown from the car. City of Cape Town Fire and Rescue Services despatched a pumper from Epping Fire Station that attended to the accident and extinguished the fire.

Bruce Sutherland 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's (FRI) monthly photographic competition is open to all its readers and 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!

Letters to the editor

I have been reading Malcolm Procter's article 'Institutional arrangements and wildfires' with interest and can only hope that the Department of Forestry and Fisheries (DAFF) appreciates this hard-working guy in the Free State, as he is indeed the only voice in the wilderness in that part of the world! Keep it up Malcolm, you are doing a fantastic job! He is realistically telling the world what really counts, as I know him!

The Eastern Free State has lately been experiencing some terrible 'mega-fires' during the 2014 fire season, as he predicted earlier. The 'time-bomb' was sitting there for a number of reasons but mostly because no concerted fire prevention measures were applied in time in the region at a regional – integrated – level as he quite rightly pointed out again this time. The farmers, nature conservators, rural population, local government bodies, central government, never even attempted to provide a proper (well planned at regional level) fire prevention system in place even when people such as Malcolm sounded the alarm bells because (i) the long absence of effective grass fuel management over years and (ii) the abnormally-high biomass addition there as a result of above-average rainfall. The scene was set for a disaster!! Of course, Malcolm was also helpless to do something to the threatening situation on his own.

I will refrain from repeating what should have been done in time in terms of integrated regional fire prevention as I have been trying to advocate this for many years, without anyone taking note or even to attempt to stand together to get somewhere (with regard to prevention that is, not 'curing', when it is basically too late). Without pointing any fingers in any direction, the growing mega-wildfire numbers in our country is a fact for all there to see – also in the Free State and even provinces such as the Northern Cape. We do not need complicated statistics to prove this. Is it not now for a 'wake-up call' for all to come together and do something positive that has proven itself in the past to work?????

First of all, our national fire danger rating needs to be improved with fuel dynamics to be included in their models. As it is, the system is providing a totally skew picture at times. For instance, I am getting sick and tired of seeing the predictions for an extreme fire danger rating for all to see lately, in the Karoo and Northern Cape. You see these areas painted red with fires burning in places such as the Western Karoo (where the bossies are miles apart for anything to burn at all) or in the savannah-grassland in the Northern Cape Kalahari (where the green grasses will never burn now after the good rains?????)

Once we have then sorted out this national early-warning system effectively, problem areas can be identifies in time and then all affected bodies in control of such a region, can put their heads (and finance) together to put a proper fire prevention system in place, well before the next fire season!

OK, maybe I get some comments now!

Neels de Ronde

The World Rescue Organisation

Each year, the WRO holds a World Rescue Challenge (WRC)

The World Rescue Organisation's (WRO) vision is to assist with the dissemination of emergency rescue and medical techniques, practices and procedures to aid the effective management of road traffic collisions and the care of those involved. The application of such knowledge can save lives and dramatically improve long term outcomes.

The WRO draws on the experience of its member organisations and its partners to develop national bodies, the rescue challenge concept and produce training programmes and initiatives that assist rescue and medical crews whilst working in the post-crash environment.

A registered charity, charity number 1100525, the WRO is a not for profit organisation with its registered office located within the United Kingdom (UK). The organisation is governed and managed by an executive committee and the WRO committee. Current WRO member organisations include the United Kingdom, Canada, USA, Spain, Australia, New Zealand, South Africa, Germany, Luxemburg, Republic of Ireland, Ghana, Brazil, South America, Portugal, Romania and Russia.

Each year, the WRO holds a World Rescue Challenge (WRC) which sees world-class rescue teams compete annually in an event designed to challenge emergency service personnel in both extrication and trauma skills and to raise awareness of the global problem of road death and injury.

Over fifty international teams participate in the challenge each year. Each extrication teams consists of six members, the team leader, two medics, two technical rescue personnel and one person responsible for operational support; with each trauma team consisting of two members.

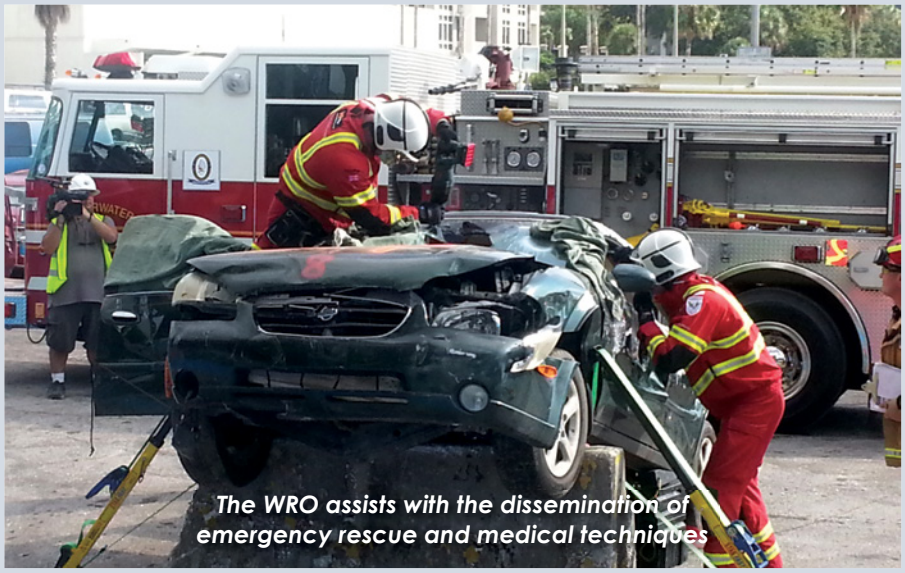
All extrication teams compete in three evolutions.

- Complex Challenge
- Standard/Limited Challenge
- Rapid Challenge

A team of international assessors observe incident command, medical and technical rescue.

To date, there have been fifteen WRCs that have been held in Australia 1999, ▶

Chair of SAMRO, Neville van Rensburg



The WRO assists with the dissemination of emergency rescue and medical techniques

Scotland 2000, South Africa 2001, the Czech Republic 2002, Canada 2003, England 2004, New Zealand 2005, South Africa 2006, Spain 2007, Wales 2008 and Germany 2009, Ireland 2010, New Zealand 2011, England 2012 and USA 2013. The 2014 WRC was held in England at the UK Fire Service College Moreton-in-Marsh.

Last year's World Rescue Challenge saw 30 extrication and 22 trauma teams compete between 9 and 12 October at the Fire Service College (FSC), Moreton in Marsh, England, which was supported by the United Kingdom Rescue Organisation (UKRO). Teams from 20 countries came together to participate in what is widely recognised as a premier global rescue event.

Steve Apter, chair of the WRO, said "The World Rescue Organisation is committed to continue to strive hard to ensure that the trauma and extrication standards are not only maintained but are continually improved. The WRO exists solely to save lives and reduce injuries and the World Rescue Challenge provides the opportunity for the sharing of expertise globally. Teams benefit by learning and sharing with each other the different skills, knowledge and understanding, which they then take away with them to put into practice for the benefit of the public that they serve worldwide."

Apter went on to say that, "The WRO is a unique organisation that is contributing to the United Nations

'Decade of Action' to reduce the number of people killed and injured as a result of road traffic collisions. Its work within the UN's post-crash response pillar has seen the WRO contribute to the United Nations Road Safety Collaboration (UNRSC) group."

Dan Zinge, vice chair of the WRO said, "A key element of the WRC event is the importance and value in coming together as a global rescue team. The real winners are the public who will ultimately benefit from the expertise and training, along with the practice and shared learning that this event has facilitated."

The World Rescue Organisation continues to go from strength to strength and has recently restructured with the introduction of an executive committee, consisting of the chair, Steve Apter; vice chair, Dan Zinge; secretary, Cameron Black; Declan Cassidy, treasurer and Mick Rogers.

International statistics

Today, 3 205 people will die as a result of a road collision. That's as many as would be killed in eight Jumbo jets crashes. Every week 22 435 people will die on the world's roads, almost 100 000 people every month. In addition to the 1,2 million people killed each year on the world's roads, between 20 to 50 million are estimated to be injured. World Health Organisation (WHO) projections indicate that by 2020 road traffic injuries could rank third among causes of death and disability, ahead of such other health problems as malaria, tuberculosis and HIV/AIDS.

Aside from the unacceptable human cost, road death costs the global economy $518 billion each year.

In the coming years, the WRC will travel to Portugal in 2015, Brazil in 2016, Romania in 2017 and South Africa in 2018. Organisations wishing to become involved with the WRO should contact the secretary at secretary@wrescue.org. For individuals interested in assisting, then they should contact their local WRO member organisation; a list of members can be found at www.wrescue.org.

The WRO's South African representative and chairman of South Africa Medical Rescue Organisation (SAMRO), is Neville van Rensburg and Julius Fleischman is the vice-chair of SAMRO. Both are WRO assessor members.

The WRO draws on the experience of its member organisations and its partners

South Africa's NDMC responds to flood disaster in Malawi

Heavy rainfall during December 2014 and January 2015 caused extensive flooding across several areas in southern Africa, affecting approximately 930 000 people

Heavy mid-season rainfall during December 2014 and January 2015 caused extensive flooding across several areas in southern Africa, affecting approximately 930 000 people, including some 300 000 who were displaced from their homes, according to reports by Relief Web. The main areas that were affected included Malawi, Mozambique, Madagascar and Zimbabwe.

In Malawi, the floods caused extensive damage to crops, livestock and infrastructure. The southern districts of Nsanje, Chikwawa, Phalombe and Zomba were the most affected. On 13 January 2015, the President of the Republic of Malawi declared a state of disaster in the 15 affected districts (out of a total of 28 districts). On 21 January, a preliminary response plan was presented to the office of the vice president, which addressed the immediate needs of up to 638 000 people who were affected by floods.

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and Malawi Department of Disaster Management Affairs situation report on 22 January 2015 indicated that 638 000 people had been affected country wide with 174 000 people displaced in three most affected districts ie Nsanje, Chikwawa, Phalombe. In addition, 79 deaths were reported and 153 people were missing in Nyanja District.

The government of Malawi made an official request to the South African government for assistance on 16 January 2015. The National Disaster Management Centre (NDMC) was tasked with determining the most appropriate form of assistance.

The NDMC requested disaster management officials from the Western Cape (WC) to form part of the response team and the chief director, disaster management and fire/rescue services, Colin Deiner, was appointed to lead the mission. The objective of the response was disaster relief and not search and rescue. The search and rescue phase was already concluded after 24 hours of the incident and an announcement was made to that effect. The mission of the government team was to assess the needs and react accordingly.

Historically, flood response has only been successfully carried out by aircraft. Many responders have in the past spent huge amounts of time and money deploying watercraft and road transport to respond to flood disasters and have been unsuccessful.

The NDMC response team were met by representatives of the South African High Commission

Colin Deiner, Neville van Rensburg and Jurgens Dyssel en route to Malawi

More than 50 tons of food, medical supplies and other cargo including mobile clinics and early learning centres were transported

- When it was concluded that helicopter support would be the prime requirement, it was necessary to delay their response for a day to ensure all the relief supplies would be in place and therefore saving money.

South African response

An advance team consisting of four disaster management specialists including Colin Deiner; Jurgens Dyssel, NDMC; Neville van Rensburg, head of rescue services, WC Department of Health and Johan Heine, co-CEO Kishugu Group, arrived on 22 January 2015 in Lilongwe and were met by representatives of the South African High Commission. The team was briefed by the South African High Commissioner, Cassandra Mbuyane-Mokone, who then accompanied them to the offices of the Malawian Department of Disaster Management Affairs (DoDMA). The team spent the rest of the evening meeting with representatives of the United Nations and World Food Programme (WFP). The WFP had dispatched 550 metric tons of food to reach more than 70 000 displaced people and were planning to increase it to some 150 000 people by the end of the week.

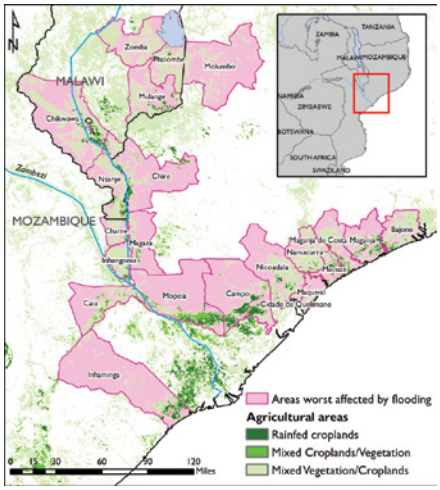
The South African team decided to hold off on any decisions until they met with the Malawi Defence Force (MDF) who were coordinating the disaster response and did an aerial assessment the following day.

The team flew back to Blantyre on 23 January 2015 and met with the head of the Malawi Defence Force air wing, Brigadier-General Peter Namathanga and the head of logistics, Colonel John Cheika. During this meeting it was established that they were experiencing great difficulty in transporting food, medical supplies, shelters and essential personnel to the areas that were most affected. A subsequent reconnaissance flight over the region indicated a large number of bridges, railway lines and roads completely destroyed and still under water. In collaboration with the MDF and DoDMA it was decided to use helicopters including an Mi8MTV from WFP and a Squirrel from Tanzania.

Operational planning commenced immediately with a view to start relief operations early on Sunday, 25 January.

A coordination centre was established in the VIP lounge at the Chileka International Airport in Blantyre. The team flew to Bangula, approximately 30 minutes south from Blantyre, where they established a forward operating base. The missions included ferrying medical and health workers to affected villages and transporting 12 tons of food from Bangula to Phalombe. This was the first food that these people had eaten since the floods occurred six days previously.

The team met with the head of the Malawi Defence Force air wing, Brigadier-General Peter Namathanga and the head of logistics, Colonel John Cheika



Areas of Southern Malawi and North/Central Mozambique most affected by recent flooding

The team was tasked by the World Food Programme (WFP) and the Malawian Government on 26 January to continue resupply missions to heavily affected areas

The team was tasked by the World Food Programme (WFP) and the Malawian Government on 26 January to continue resupply missions to heavily affected areas.

14 tons of food and 42 essential personnel was air lifted on 27 January management team also met with the WFP logistics manager, Alistair Cook, from New Zealand, who expressed his satisfaction at the contribution of the South African team.

Operations continued until Friday, 30 January 2015, when the team returned to South Africa. A total of 65 operational missions lasting for more than 81 flying hours were completed. More than 50 tons of food, medical supplies and other cargo including mobile clinics and early learning centres were transported. In addition, more than 80 essential/medical staff (health care professionals etc) was transported. Two critically ill patients were also evacuated to Bangula from their homes in Makango.

Overall, the operation was successful and the impact made by a relatively small South African response team was obvious. Due to the lack of consistent air support, the critical importance of the operation became clear when they accessed certain places that had not been reached since the start of the flooding and provided food to people who had not eaten in six days.

Many lives were saved by the efforts of this team.

The success of the operation underlined South Africa's ability to respond to disasters effectively. This is only the second time an official South African response team was deployed to a major disaster outside our borders.

The Mi-8 helicopter contracted by the World Food Organisation

Rescue South Africa provides humanitarian aid to Malawi

Rescue South Africa members prior to departing

Rescue South Africa (RSA), a non-governmental organisation, sent 23 volunteers to flood-stricken Malawi at the request of the United Nations (UN) and assisted local authorities providing assistance to the thousands who have lost homes in the villages surrounding Malawi's capital city, Blantyre.

Roads and bridges were washed away across Blantyre and homes submerged under water. Displaced people were living in makeshift shelters living off handouts because their crops had been swept away during the floods.

Rescue SA aid workers, including doctors, paramedics and specialist rescue technicians, distributed food and assisted UN officials putting up shelters for countless people since arriving in the country last Wednesday, the organisation's chief executive, Ian Scher, said.

The medical team treated 120 people for dysentery. They are however concerned by the rise of diseases such as malaria and cholera brought on by the still water.

The Rescue South Africa team camped in a home belonging to a sugar company.

Subsidised vehicle rescue training partnership formed

Nic Bruchhausen and Lulama Tantsi

First Attack Fire and Equipment, the southern African distributor for Resqtec, is partnering with LO Tantsi Fire Consultants to provide subsidised vehicle rescue training across southern Africa.

The project is the first of its kind in the local market and with it First Attack hopes to build brand recognition while making motor vehicle rescue training more accessible to emergency personnel.

"An understanding of basic vehicle rescue training is a critical component of good patient management" explains First Attack managing director, Nic Bruchhausen, who adds "in a country where motor vehicle accidents are a daily occurrence we thought we'd promote Resqtec's Total Control by going a step further and offering accredited training".

The Resqtec brand is synonymous with innovation and Bruchhausen says that LO Tantsi Fire Consultants was the obvious choice. "We decided to target a SAQA-aligned outcome and explored several options but quickly realised that while there are several accredited players in the market, it's the experience of the facilitators that determine the quality of the training" Bruchhausen says. "LO Tantsi has established itself as a leader in the field with accomplished facilitators who have real-world rescue and fire fighting experience and they're known as a breeding ground for high calibre fire fighters"

The five-day training course will satisfy the requirements of the SAQA unit standard ID: 242855 (perform vehicle rescue operations), which is one of the 12 core unit standards of the Fire and Rescue Operations National Certificate (SAQA qualification ID: 64390).

Training will be provided for private students as well as corporate groups in South Africa, Zimbabwe, Namibia and Botswana. The first course will run in Johannesburg at the beginning of March.

Marius du Toit, Rescue SA; Peter van der Spuy, ER24; Dr Pankil Patel, MD Rescue SA and a local Malawian lady

The RSA truck got stuck in mud and food was distributed at the scene

Marius du Toit, Rescue SA and Chris Barnard, Off Road Rescue Unit (ORRU) loading food for distribution

Rescue SA members distributed food and assisted UN officials putting up shelters

Scher said their efforts were initially hampered by South African customs officials refusing to allow them to leave the country with some of their camping equipment, generators, food and other equipment. "Despite that major setback, we were able to, through the generosity of local businesses, get to work helping out people really quickly. We slept on the floor of a house belonging to Illovo Sugar where we had electricity and a kitchen. The team was out there every day from 5h00 and was on the road for up to eight hours travelling to where we needed to be. Bad weather hampered some of our efforts. We had a flash flood that delayed us for two hours on one day but we were able to pull through," he said.

"Helping out in a flood situation is not like going into a disaster area like an earthquake where you are pulling out bodies from the rubble. In this situation it is the diseases that come afterwards, caused from the water, that are a concern," Scher added.

One of those at the front line of the medical effort is Pietermaritzburg paramedic, Paul Knoesen. Knoesen, an advanced life paramedic for ER24, said the experience was humbling. "To see everybody come together in a time like this has been amazing. Businesses, NGOs and ordinary people are all pulling together to help out. This is a very poor country and the destruction is devastating but people are so grateful for what they have," he said.

Modern fire engines to boost City of Cape Town's fire fighting capacity

The first of seven new fire engines for City of Cape Town Fire and Rescue Service

The City of Cape Town has taken delivery of the first of seven modern all terrain fire engines that will further boost the fire and rescue service's response to the increase in both structural and vegetation fires during this time of year. The vehicle has been acquired at a cost of R3 million.

The flip-down locker doors below the mid-level lockers and wheel arches form a solid walkway along the sides for access to top shelves

The vehicles were built by FES Manufacturing in Cape Town on a MAN TGM 18-33 4x4 chassis, a 4,2m wheelbase with a gross vehicle mass (GVM) of 18 000kg and double cab. "The Euro 3, turbo charged six-cylinder motor has 330hp output and 1 250Nm torque, with an antilock braking system (ABS) and engine brake," says Marius Webber of FES Manufacturing. The air suspended double cab accommodates a driver and a crew of five and a 6 800kg winch and bull bar is mounted on the front chassis.

Constant all-wheel drive allows for easy traverse of urban and rural terrain. The vehicles have GPS functionality, a 12-speed selectable automatic/tripmatic transmission to meet all road conditions and a front/rear differential and transfer case with selectable lock.

"The vehicles unique design allows for more space for equipment and personnel and is fitted with automatically switched 4,9m LED light mast extending from deck level that illuminates the scene of a fire when it is dark or there is no street lighting, which is particularly useful in informal settlements. The constant rated power take-off (PTO) with cooling facilitates prolonged pumping," added Willie Olivier, divisional commander: fleet operations and technical services, City of Cape Town Fire and Rescue Service.

The units are fitted with 3 000-litre roto-moulded water tanks and 250-litre roto-moulded fire fighting foam tanks. The Rosenbauer NH40 pump delivers 4 000l/min at 10 bar normal pressure and 45 bar high pressure and has a Fix Mix around the pump proportioning system at 0,5 percent, 1 percent and 3 percent selectable. Pump engagement and acceleration is done from the pump operator's panel. The pumps can produce water or foam with a single control and can be operated independently, which frees up the pump operator. Automatic tank fill from hydrant to maintain water level is done without operator intervention. The tank level indicators are on both sides of the superstructure and are visible up to 250m from vehicle.

Other gear and equipment include two 50m electric rewind hose reels with hose guides and a removable, electrically extending deck-mounted monitor that also doubles as a ground monitor with base. There is a single operator ladder gantry with a main triple extension ladder on the vehicle deck.

The 3,8 cubic metres of locker space has LED lighting above mid-level locker floors with roller shutter doors and central locking. The flip-down locker doors below the mid-level lockers and wheel arches form a solid walkway along the sides for access to top shelves.

The custom made stowage secures all equipment in a designated position and ensures that no tool needs to be removed for access to the next.

"These vehicles offer us so much more in terms of accessibility and features, which means that one vehicle can now do what previously required the use of two vehicles because of design limitations. So, already we can look forward to saving on both resources and manpower. When you consider that we spent a little over R2 million on a fire engine four years ago, we really are getting value for money with the new acquisitions. There is a huge expectation of our fire fighters during this time of year and we are doing everything possible to equip them as best we can so that they can save lives and properties," says the City's Mayoral Committee Member for Safety and Security, Alderman JP Smith.

The Rosenbauer NH40 pump delivers 4 000l/min at 10 bar normal pressure and 45 bar high pressure

"The acquisition forms part of our replacement programme", says Willie Olivier, divisional commander: fleet operations and technical services. "In summer time the bulk of our calls are for vegetation or wildfires and in winter for structural fire and other emergency incidents. These fire engines offer urban protection as well as wildfire suppression line of attack. We are also able to deploy the new engines to our most ▶

The single operator ladder gantry and triple extension ladder on the vehicle deck

Constant all-wheel drive allows for easy traverse of urban and rural terrain

Multiple vehicle accident

A teenager was killed and six other people hospitalised

A teenager was killed and six other people hospitalised after a multiple motor vehicle accident (MVA) on Saturday, 17 January 2015 in Ekurhuleni.

The teenager, aged 15, was fatally injured and various others hospitalised in the MVA, which involved several vehicles on the N3 North/N12 split at Gillooly`s interchange. Six vehicles and two super link trucks fully loaded with fertiliser and diesel, respectively, were all involved in the collision.

Ekurhuleni Disaster and Emergency Management Services' rescue team responded to the scene and found two patients still trapped inside one of the vehicles crashed by a truck involves. Hydraulic rescue tools were used to free the patients from the wreckage, however, the 15 year-old was declared dead on scene.

Six other patients were transported by ambulances to various hospitals around Ekurhuleni respectively. Two were in critical conditions; two were in serious but stable conditions while the remaining two suffered minor injuries.

The N12 split from the N3 was closed off to ensure that all wreckage and oil spillages were cleared off the road.

Article and photographs courtesy of Ekurhuleni Disaster and Emergency Management Services.

Ekurhuleni Disaster and Emergency Management Services' rescue team responded to the scene

Hydraulic rescue tools were used to free the patients from the wreckage

- northern boundary where Atlantis has very soft, sandy conditions and also to our southern areas, which are quite mountainous," concludes Olivier.

The City's Fire and Rescue Service has already responded to thousands of incidents since the summer season started in November, with more than 2 347 vegetation fires responded to at the end of January 2015. "Since the beginning of November, staff has responded to a total of 6 752 fire related incidents of which 380 were to fires in informal settlements that have resulted in 21 fatalities and 1 369 structures affected," said chief fire officer, Ian Schnetler. The statistics are slightly higher in terms of actual informal responses than the corresponding period in 2013/2014 (355 fires, 1 497 structures affected, 37 fatalities) but the fatalities and number of structures affected are less. However, it is still cause for concern.

23 primary school pupils involved in major incident

Paramedics, firemen and several emergency services arrived at the scene of the high impact accident

A bakkie (light commercial vehicle) carrying allegedly 23 primary school pupils, crashed over the edge of a road and down into a house in Imbali Township in Pietermaritzburg, KwaZulu-Natal (KZN), South Africa, on 28 January 2015, reported chief fire officer, Billy Paton, of Msunduzi Fire and Rescue Service.

Paramedics, firemen and several other emergency services arrived at the scene and found accident debris consistent with a high impact accident spread over a large area. The children were aged between five and 10. Six died on scene after being trapped in the wreckage under falling debris from the house and another died later that evening in hospital. There were numerous serious injuries and the children were taken to local hospitals by the emergency services.

A report from the scene indicate that the single cab bakkie with no canopy was coming down a steep hill in Edendale Road when the driver veered off the roadway and smashed through a gate, overturned and crashed into a house with such force that part of the house collapsed. It appeared the driver lost control on a bend. The bakkie was transporting pupils from Fezokuhle Primary School in Pietermaritzburg.

The house collapsed due to the force of impact

Msunduzi Fire and Rescue Service received the call at 14h24 and dispatched the Edendale Fire Station major pumper and crew and command vehicle. Acting station officer, Rodney Lewis, was in charge and reported seven blue code, six red code and seven green code entrapments extricated with hydraulic rescue equipment and severe damage to the structure of the house.

Road Traffic Inspectorate spokeswoman, Zinhle Mngomezulu, said that it was not the normal driver driving the bakkie but it was her daughter. Investigators were trying to establish her age and whether she had a driver's licence.

Netcare 911's spokesman, Chris Botha, said that when paramedics arrived, they found the driveway full of debris and the twisted frame of the bakkie.

Those taken to hospital 'sustained injuries ranging from critical to serious'. Botha said, "After triaging the injured, medics found that seven children tragically died due to the extensive injuries that they sustained, while 15 others sustained injuries ranging from critical to serious".

KwaZulu-Natal Education Department spokesman, Sihle Mlotshwa, conveyed MEC Peggy Nkonyeni's deepest condolences to the families of the dead, teachers and fellow pupils. He said the department had done a lot to ensure that pupils were safe while travelling by creating the appropriate policies, such as the learner transport policy.

CFO Reinard Geldenhuys inspecting the damage

Pink Piano Fire:
Thinking out of the box

By Reinard Geldenhuys, chief fire officer, Overberg District Municipality

When a building burns, traditionally we would send a structural fire truck or pump. When veld or bushes burn, we would send a chopper with a bucket among the other resources. Heaven forbid you mix the two!

Situated in Bredasdorp in the Western Cape Province of South Africa, the Pink Piano restaurant is a medium size building, consisting of a historic thatch roof structure that in later years, was expanded with formal brick and corrugated sheeting roofing where the kitchen and bar area is housed.

Upon arrival on scene, Overberg Fire and Rescue Service found a rapidly expanding fire in the kitchen area with flames emitting through the front of the building. Two pumps were dispatched to the fire. The incident commander (IC) did a sizeup and it soon became clear that committing resources to protect the thatch roof part would weaken the interior attack on the main fire, which would result in total loss of that part of the building.

The solution, therefore, was to bring in the Working on Fire Huey doing high

The Pink Piano restaurant in Bredasdorp

Personnel continued with mop up and salvage operations

Multi-agency rescue saves 21 lives

South Africa's Transnet National Ports Authority (TNPA) activated the National Sea Rescue Institute's (NSRI) Gordon's Bay duty crew at 16h25 on Sunday, 25 January 2015 following reports of people trapped by the incoming tide on a cove cut off by high tide at Dappat se Gat, Koegelbaai, between Gordon's Bay and Pringle Bay in the Western Cape (WC).

21 people were trapped by the Spring tide and Dappat se Gat

Photo: Andre Beuster

It appeared that groups of people had gone onto the popular sightseeing rocky outcrop during the current new moon Spring low tide not realising that high tide would cut them off from mainland and that the Spring tide's high tide risked engulfing the rocky outcrop.

Some of the people, realising their predicament, called for help and on arrival on-scene NSRI rescuers confirmed that the risk of getting rescue swimmers onto the cove was too great in the incoming tide. Rescue craft would not be able to get close enough to extricate the group of people from the sea side without incredible risk.

At that stage it was estimated that at least 16 people were trapped and NSRI Simon's Town, Western Cape Metro Emergency Medical Service's rescue squad and the WC ▶

level water drops over the thatch using a high percentage of Class A foam. After three drops, the roof was sufficiently drenched to prevent ignition.

In the meantime, ventilation and interior attacks continued. It was difficult to reach the seat of the fire in the kitchen area, in spite of adequate ventilation and three jets concentrated.

It was then decided to withdraw the fire fighters and do two concentrated hover drops over the kitchen area, penetrating through the roof and drenching the fire. Following the drops, the chopper was stood down and personnel continued with mop up and salvage operations.

Senior fire fighter Billy Gilliomee of Overberg Fire and Rescue Service

The WoF Huey did a concentrated hover drop over the kitchen area

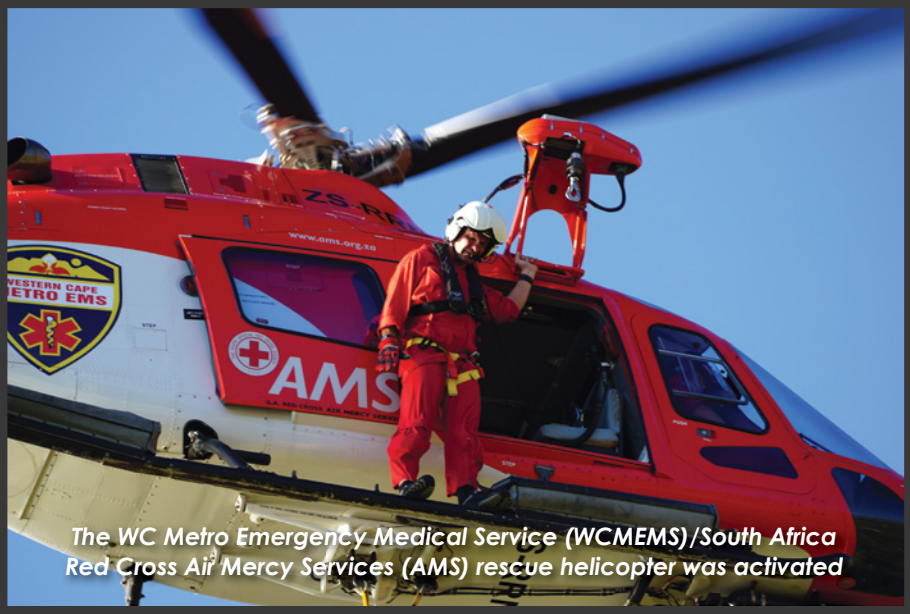
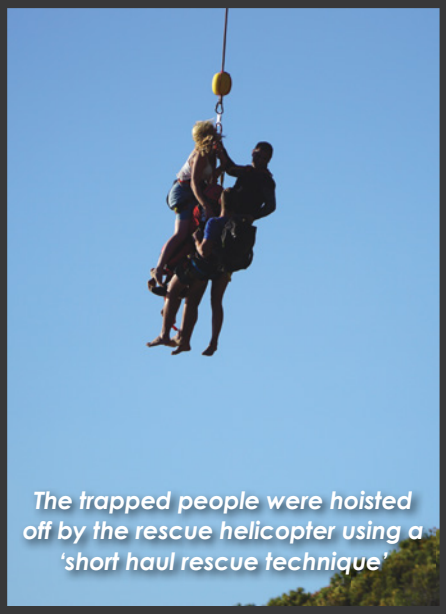


Photo: Andre Beuster

The WC Metro Emergency Medical Service (WCMEMS)/South Africa Red Cross Air Mercy Services (AMS) rescue helicopter was activated



The trapped people were hoisted off by the rescue helicopter using a 'short haul rescue technique'

Photo: Andre Beuster

Metro Emergency Medical Service (WCMEMS)/South Africa Red Cross Air Mercy Services (AMS) rescue helicopter were activated.

NSRI Simon's Town dispatched the rescue craft Spirit of Safmarine III and the Skymed rescue helicopter responded to join NSRI Gordons Bay rescue swimmers that were on the scene on the shore and NSRI Gordons Bay rescue craft Spirit of Surfski and Inge (a Swedish rescue runner) that were standing by on the scene.

Cape Town Fire and Rescue Services and the South Africa Police Services were also dispatched.

The decision was taken to hoist as many people as possible in relays using the rescue helicopter before the high tide engulfed the cove. NSRI rescue swimmers and the rescue craft stood by to retrieve anyone who got swept into the ocean.

It was then determined that 20 people including two boys aged seven and eight years old, 10 adult men and eight adult women, were trapped by the new moon Spring tide and that the sea would cut off the popular rocky outcrop at high tide and risk being engulfed under water at high tide. During normal tide these rocks are easily accessible even at high tide.

Western Cape Metro EMS rescue diver, Jason Higgins, was hoisted down from the WCMEMS/AMS rescue helicopter and supervised the successful rescue of all 20 people who were hoisted off by the rescue helicopter using a 'short haul rescue technique'.

The trapped people were huddled to a corner of the rocky outcrop as the tide rose and were kitted into harnesses by Higgins, five at a time. A static line was hoisted to mainland where additional rescuers were on hand to receive them.

The rescue helicopter had reached its fuel limit when the last group were hoisted off and the helicopter was forced to return to base having successfully completed the rescue operation. It then emerged that one man was still trapped but he had not been in a position to indicate his entrapment due to the high seas and he was well hidden from view. Rescuers were only made aware of him after his wife indicated where the man had last been seen and that he remained outstanding.

A rescue team from Wilderness Search and Rescue (WSAR) was deployed from the land side and they rescued the 45 year old man after negotiating steep cliffs to reach the man.

In total 21 persons were rescued. When rescue teams were finally leaving the scene most of the rocks were engulfed by water.

The rescue crew included Captain Francois du Toit; hoistman, Andre Beuster; AMS paramedic, Jonathan Groenewald and Metro technical rescuer and paramedic, Jason Higgins.

The rescue crew included Captain Francois du Toit; hoistman, Andre Beuster; AMS paramedic, Jonathan Groenewald and Metro technical rescuer and paramedic, Jason Higgins.

Photo: Andre Beuster

Gale force winds fuel Hawston, Onrus fire

By Chief Fire Officer, Lester Smith; Fire, Rescue and Disaster Management, Overstrand Municipality

A wildfire that started on the northern edge of Hawston on Thursday, 15 January 2015, jumped the R43, a provincial route in the Western Cape Province of South Africa that connects Ceres with Gansbaai via Worcester, Bot River and Hermanus. The wildfire crossed over the mountain on the east and was fuelled by gale force north-easterly/easterly gusts.

There were three major fires simultaneously in the Overberg district; one at Grabouw, one between Stanford and Gaansbaai and the Hawston/Onrus fire.

Chief fire officer of Overstrand Municipality, Lester Smith, reports on the operational issues.

The Hawston wildfire crossing the mountain, fuelled by gale force north-easterly/easterly winds

Photo: Dean Donnelly

Thursday, 15 January 2015

At approximately 15h30 on Thursday, 15 January 2015, a wildfire was reported to Overstrand Fire, Rescue and Disaster Management east of Hawston High School. The first vehicle arrived on scene at 15h40 and found bush and grass burning in the area. Due to strong winds reaching 46 kilometres per hour, the fire jumped the R43 and spread towards the Hawston mountain range.

More resources were requested by the initial officer on scene and four additional fire fighting vehicles with 15 crew members and three senior officers of Overstrand Fire and Rescue, were deployed. Aerial and ground support was requested, which consisted of one spotter, one Working on Fire (WoF) helicopter and a WoF ground team consisting of 21 members. Overstrand Law Enforcement, traffic and South African Police Services (SAPS) were also requested to assist with traffic, crowd control and other related matters.

Initial objective:

1. Safety of all public and personnel
2. Contain the fire on the mountain ridge and prevent it from spreading to Karwyderskraal and Onrus Rivier

Due to zero visibility and thick smoke, the helicopter was unable to start water bombing immediately. Approximately half an hour later, the WoF helicopter started bombing until last light. According to the Advanced Fire Information System (AFIS) fire frequency, the land cover consisted of thicket, bushveld, bush clumps and high Fynbos. At this point, the fire already spread towards Karwyderskraal and Hawston Mountain. At about 20h15 it was confirmed that fire had spread and descended above the crest at Berghof and Chanteclair. Vehicles and fire fighters were diverted to Berghof and Chanteclair to assist

The objective then changed from containing the fire line to structural protection at Berghof and Chanteclair.

At approximately 22h15 a code red was declared to Western Cape Provincial Government by Overberg District Municipality and additional resourced were requested. Three type 1 urban pumpers, two water tankers from the City of Cape Town and a Samil were procured from Overberg District Municipality. Precautionary evacuation procedures commenced just after 23h00 at Berghof due to the fire that was spreading rapidly, spot fires, thick smoke and threat to property and life.

Members of the public and approximately 300 elderly and sickly citizens from Onrus Manor Retirement Village were evacuated to the Dutch Reformed Church in Onrusrivier. Kidbrooke Place retirement village was also evacuated and approximately 200 residents and 28 residents, who stay in the care centre, were evacuated to the United Church in Hermanus. Western Cape Provincial Ambulance service and EMR private ambulance service transported eleven patients to Hermanus Medi Clinic and also assisted with transporting patients to different churches.

At 00h10 the fire was reported to have reached Sandbaai, near Curro and four vehicles were activated to contain the fire. The fire was ▶

Air support was requested on 15 January 2015

Photo: Dean Donnelly

brought under control due to heavy rainfall that started at 03h03 and the ground teams, that had been deployed, were withdrawn from the scene. Four vehicles of Overstrand Fire, Rescue and Disaster Management continued to monitor as the additional resources, which were requested left the scene.

Friday, 16 January 2015 operational period 08h00 to 20h00

Objectives:
1. Safety of the public and personnel
2. Mop up all visible hotspots before 15h00
3. Patrol the fire line before 20h00

Two task force teams were established that consisted out of one WoF stick and one wildfire engine crew. Their objective was to cut open the dense Hakea trees and to extinguish all hot spots on the fire line in Division A.

Two fire engines were placed in division charlie to do mop up operations and patrol the fire line.

One fire engine continued with mop up operations in division delta.

At approximately 13h40, a flare up was reported in division alpha and task forces were unable to contain the flare up. The standby WoF Huey chopper was activated to assist the ground crew. Within 45 minutes three other flare ups were reported in division charlie x2 and division delta. All four flare ups were contained within two hours with assistance from the chopper. The WoF chopper remained on standby until the next day. Mop up operations continued.

Operation period 20h00 to 08h00 Friday, 16 January and Saturday, 17 January 2015

Objectives:
1. Safety of the public and personnel
2. Ensure the fire remained contained
3. Patrol the fire line

WoF teams were deployed in division A and charlie where previous flare ups had occurred. The team remained on the line throughout the night.

Fire engine crews continued with mop up operations in division delta and remained highly visible through the night. No flare ups were reported through the night.

Operational period 08h00 to 20h00 Saturday, 17 January 2015

Objectives:
1. Safety of the public and personnel
2. Ensure the fire remained contained
3. Patrol the fire line

The last major flare up was contained during this operational period. Crews continued with mop up operations throughout the day. The fire operation was scaled down until only two fire engines remained on scene until Sunday evening at around 21h00, when all fire services resources left and returned to station.

From 19 to 23 January 2015 one fire engine remained on scene during the day and no major flare ups were reported.

No reports were received of lives lost or property that was destroyed or damaged during the fire and no fire fighter was injured. The extent of the fire is estimated to have reached 810 hectares.

The real success of this fire was how the community of Overstrand assisted each other during the time of need. The assistance and cooperation of the public made our work easier. We would like to thank the public and local business who supported us with food, cool drinks water etc.

Overstrand Disaster Management already started with a planning process to do prescribed burns in the areas that have not burned.

Overstrand station commander, Angelo Aplon, reported that the Windsor Hotel, situated on the beach front in Hermanus, held a breakfast that was attended by a representative of all the different emergency services, thanking them for their service.

FRI would like to thank the Hermanus Times for assisting in procuring the photographs.


The Windsor Hotel held a special breakfast, thanking the emergency services

Photo: Dean Donnelly

Hi-tech vessel to boost City of Cape Town's water rescue operations

Alderman JP Smith at the launch of the new Stingray rescue rubber duck

The dive unit of the City of Cape Town's Fire and Rescue Service is keeping up with the latest trends by acquiring new equipment that will enhance their current capacity to deal with rescue operations in the water.

The service has taken delivery of a new hi-tech rescue rubber boat that will further boost the response of its dive unit to flooding and water operations. "The units are stationed at Roeland Street and Milnerton Fire Stations and further acquisitions will be stationed at Strand Fire Station," said chief fire officer (CFO), Ian Schnetler.

The City's Fire and Rescue Service is a multi-functional emergency response service, which deals with a range of incidents apart from fire suppression and prevention. One of its areas of expertise is a dive unit with staff who are fully trained as divers. The district head of operations - west, who is responsible for the diving unit, is Barry Alers.

Stingray Marine, situated in Durbanville, supplied the new rescue rubber duck and jet ski, which was purchased through the fleet management division. The engines of the new rubber duck are new-generation and have a 95-litre fuel tank capacity. The boat can accommodate six crew members with their diving gear, multiple patients and is also rigged to do resuscitation (CPR) on board.

Currently, the unit consists of 24 qualified divers and 10 skippers and this year the City will boost the staff complement by training an additional 10 divers and 10 skippers. The new vessels will add to the unit's current fleet of two rubber ducks, three jet-skis and an aluminum boat that is used on inland water bodies and in flooding situations where debris might cause damage to a rubber-hulled boat. The new boat will bring the tally of rubber ducks to three.

"We have invested quite heavily in our specialised services so that we can offer the best possible service to our residents. This is but the latest example of our efforts and shows our commitment to creating a safer city by equipping and training our staff to deal with whatever situations may arise," said the City's Mayoral Committee Member for Safety and Security, Alderman JP Smith.

Photograph courtesy of City of Cape Town Fire and Rescue Service.

South Africa assists
Mozambique Government during floods

Article by Lieutenant Colonel PAL Paxton
Photos by Captain Sello Segone
Additional reporting by Captain Sello Segone

Medical staff busy with final preparations before taking off

The South African National Defence Force (SANDF) has just returned from its rescue operations in flood-stricken Mozambique. 28 Squadron C-130BZ touched down at Air Force Base Waterkloof at 12h00 on Saturday, 31 January 2015, after the 80-strong SA National Defence Force deployment to assist a flood-stricken northern Mozambique, a job well done.

The operation proved successful albeit very challenging due to the weather conditions and high humidity.

"Fourteen days were allocated for the mission and the team wrapped it up on target and on time," said Lieutenant Colonel Piet Paxton of Joint Operations.

The South African (SA) Government received a request from the Mozambique Government to assist in the flood stricken areas in the Zambezia Province. The initial planning and assessment took place over the period 14 and 15 January 2015 and the main force consisting of three helicopters ie two Oryx and one Augusta A109, an SA Navy diving team and a South African Medical Health Services (SAMHS) team arrived in Quelimane on 16 January 2015.

The two and half hour flight from South Africa to Mozambique afforded the opportunity to see the damage caused by the floods. Zambezia is a province approximately 1 600 kilometres from Maputo and Quelimane, the capital city in the province and was chosen as the centre of operations as it was within reasonable distance of the most affected areas and has an airport. This was also an ideal location from where the ground crew as well as logistical and technical staff could support the operation. Amidst the humid and scorching temperatures the operation, codenamed LOAPI, escalated on 17 January 2015 and was fully operational the following morning.

The daily operations under operational command of Lt Col Eddie Rieger, proved very effective from the word go. Good cooperation between all the role players was evident during the daily briefings at the local emergency centre. Members from the Mozambique Disaster Management Organisation (INGC), nongovernmental organisations (NGOs), SANDF and the Mozambique Air Force coordinated the delivery of aid, food, shelter and medical supplies, donated from all over the world, from the airport in Quelimane.

Tasks were then coordinated and aircraft continued with secondary tasks normally associated with floods. Daily tasks included the distribution of food and other aid from the various distribution points in the area as well as medical evacuations. Thereafter, the focus was on delivering food and critical medical supplies to areas and small communities all over the Zambezia Province.

On Friday 23 January 2015, a medical team was sent out to Ile district to evacuate a woman in distress. This was a 38-year old woman who was in the early

Locals assist with the off-loading of food supplies from an Oryx helicopter

The 80-strong SA National Defence Force deployment assisted a flood-stricken northern Mozambique

Daily tasks included the distribution of food and other aid

stage of pregnancy and having complications. The team, from the Institute for Aviation Medicine, headed by Lt Col (Dr) Charl Wynbergen, were airlifted to the position of the patient and as soon as they got there took care of the situation with such precision much to the appreciation of the local population. Dr Chazelle Esterhuizen, Capt Susan Pretorius (nurse), Cpl's Benjamin Mothulwe and Tshepo Mashishi of 7 Medical Battalion Gauteng Province (7 Med Bn Gp) Search and Rescue Team, all executed their duties within 30 minutes and the Oryx was back at Quelimane Airport and the patient transported to the local hospital by ambulance.

Capt Lucky Mthini, operational medic from 7 Med Bn Gp, described this humanitarian operation as heart breaking because in as much as he was medically tasked, it was sad to see the suffering and distress the disaster has caused to families especially children.

In between the landing and taking off of the aircrafts, one was afforded the opportunity to mingle with the local population. This was an opportunity to learn Portuguese in order to sustain oneself as there are few people who speak English. During these sessions one had the opportunity to witness how the locals appreciated efforts by the SANDF members to alleviate their plight.

The air crew flew under extreme and difficult conditions to deliver much needed aid, humidity being the biggest challenge. A total of 70 tons of food and medical supplies were delivered to communities in dire need. 10 medivac flights were executed to assist patients in need of medical care. Most cases were pregnancy related and no casualties were registered. A huge amount of shelter material was distributed to those people who were displaced during the floods.

The SANDF team returned on Saturday, 31 January 2015. No operations are planned for the near future.

"While the SANDF deployment was part of a far bigger humanitarian operation, we can stand tall knowing our men and women in uniform did what was expected of them and more," Paxton added.

Swift water rescue during a flood

Innovative e-learning project to help prepare the public for natural disasters

By Robert Stacey, project officer, Fire Support Services, Northumberland Fire and Rescue Service, UK

Northumberland Fire and Rescue Service (NFRS) is playing a key role in a Europe-wide project aimed at saving lives during natural disasters.

NFRS is one of six agencies in the European Union that will deliver a two-year project to create an online resource, which will educate the public on how to prevent, prepare and respond to disasters.

This innovative project is called 'e-Learning for the Prevention, Preparedness and Response to Natural Disasters' (the e-PPR Project) and, along with NFRS, involves partners from Denmark, Romania, Estonia, Lithuania and Spain.

ePPR Group at the KO meeting in Spain Northumberland

The project began in October 2014 and will run until October 2016. The European Commission is co-funding the e-PPR project within the framework of the Erasmus + Programme. Four key workshops are planned during the course of the project and the first meeting to take place in Spain in December 2014. NFRS will then host the second workshop in Northumberland in mid-2015, which will be followed by meetings in Lithuania (late 2015) and Denmark (2016).

During the course of the project, activities will focus on four specific weather-related emergencies: floods, storms, heat waves and wildfires. The key outcome will be the publication of a number of e-learning modules that are specifically tailored to educating and preparing the public for these four types of emergencies. NFRS and the partner agencies are aware of the need to tailor education material to meet the needs of specific target groups in order to effectively communicate key messages and to maximise potential impact and benefit. To provide a specific example, educational content developed for adults will not necessarily be effective for communicating key messages to children and young people. The e-PPR partners will therefore be developing different modules for four different social groups:

- primary school children
- secondary school students
- adults, including vulnerable adults
- and emergency services/first responders

Preliminary versions of the e-learning modules will be trialled with sample groups from each of the social groups and each of the partner countries. The feedback will be gathered and analysed and the partners will then amend and refine the e-learning modules prior to their final publication. Once finalised, the e-learning modules will be made available in six European

languages (English, Danish, Estonian, Lithuanian, Romanian and Spanish) and will be made publicly available via a bespoke web platform.

While the project partners will be working very closely together to collaboratively develop the e-learning modules, the EU-wide significance of the project means that the partners will also be engaging with a number of external stakeholders to identify existing examples of good practice and to invite contributions from other stakeholders. NFRS is already working very closely with a number of departments within Northumberland County Council and has also circulated letters to a number of key stakeholders around the UK, including individuals/ organisations with national, regional and local remits for preventing, preparing and responding to civil emergencies. It is NFRS's intention to continue this wider engagement by inviting some UK stakeholders to the Northumberland workshop in 2015.

NFRS is well-placed to provide an important contribution to the e-PPR project. Firstly, NFRS brings some excellent technical and practical experience to the project team, with officers at NFRS responsible for planning for and responding to recent storms, flooding and wildfire incidents within Northumberland. Secondly, NFRS has significant experience of successfully participating in EU co-financed projects, having previously been a project coordinator and partner on EU projects addressing arson (European Exchange of Best Practice in Arson Prevention and Investigation), fire risk (the ANSFR Project), wildfires (European Forest Fire Networks Project) and flooding/water rescue (EVROs Project and Watersave II).

Alex Bennett, chief fire officer with NFRS, said: "The impact of natural disasters shouldn't be underestimated and can include not only loss of life, but also long-term psychological distress, economic loss and damage to property, infrastructure and the natural environment.

"We've seen first-hand in our region the damage floods and storms can have on our communities and we're pleased to be able to play our part by sharing our knowledge and experience to a wider audience."

Wildfire fighting

Dave Ledger, deputy leader of Northumberland County Council, with responsibility for NFRS, added: "We're delighted that the expertise of the fire service in Northumberland will form part of a learning package which could benefit millions of people across Europe.

"We're playing a key role - once the information has been pulled together the plan is to trial the e-learning packages in schools in the county before it goes Europe wide."

The project has already had a very positive start. The first transnational meeting was held in Alcalá de Guadaíra, Spain in December 2014 and provided the partners to present and discuss their initial proposals for the educational content of the different e-learning modules. The meeting gave the partners the opportunity to discuss core messages, presentation techniques and share feedback and advice. The partners also visited a local emergency centre and learned about the education programmes delivered in the South of Spain to help keep the public safe from wildfires and other emergencies.

The next project meeting will be held in Northumberland in June/July 2015. During this meeting, the project partners will learn more about how NFRS and local partners prepare, plan and respond to natural disasters and emergencies. The partners will also review and discuss the first full draft versions of the e-learning packages.

NFRS will continue to circulate information about the e-PPR project to key stakeholders and a number of press releases are already scheduled for release throughout the project. If you would like any further information about the e-PPR project, please visit the following website: http://www.northumberland.gov.uk/Default.aspx?page=4604 .

The e-PPR project partners are:

- Frederikssund-Halsnæs Fire and Rescue Service, Denmark (lead partner)
- Colegiul National Vasile Goldis Arad, a primary and secondary school in Romania
- Lohusuu Kool, a primary and lower secondary school in Estonia.
- Northumberland Fire and Rescue Service, United Kingdom
- Ayuntameinto de Alcalá de Guardaíra, a city council in southern Spain.
- Vilniaus Apskrities Priesgaisrine Gelbejimo Valdybam, a fire and rescue board in Lithuania.

Truck explosion at Kasumbalesa Border post

Photo: Fleetwatch

Fire fighters fought to kill the fire at the Kasumbalesa border

On 24 November 2014, at approximately 17h00, a leaking petrol tankers fuel at the Kasumbalesa border post, linking Zambia and the Democratic Republic of Congo, caused a deadly inferno that endangered the lives of 67 Zimbabwean truck drivers. Approximately 100 trucks were destroyed in the fire, four truck drivers died while ten were severely injured. Among those who died were two Zimbabweans, one Zambian and a Tanzanian.

The cause of the fire has been disputed; however, it is likely that a petrol tanker was leaking resulting in the spread of fuel to an area where some of the drivers were cooking. As the area does not have a dedicated fire department it is said that the fire lasted until the early hours of 25 November 2014.

"This should never have happened. Delays at this border post need to be eradicated to prevent such large volumes of trucks being made to park in such unsafe conditions, some of them for up to a week, while waiting for clearance," states Federation of East and Southern Africa Road Transport Associations (FESARTA).

Hundreds of trucks pass the Kasumbalesa border daily as a result of this being the only official crossing point for the output of ore from the mines in Katanga and the supply of Lubumbashi of region products. This includes goods from all over southern Africa. On the day of the incident, 271 trucks were parked at the border, some up to a period of a week while waiting for clearance.

With an the understanding that borders are congested and space is at a premium, FESARTA says that something must be done to prevent tragedies like these occurring in future and recommends that either dangerous goods vehicles be given fast clearance or given special parking areas. FESARTA sincerely regrets the loss of life in this accident, and extends its condolences to the families of those deceased.

Investigations are in process while communication between FESARTA, Interchurch Cooperative for Development Cooperation (ICCO), and the National Road Transport Association (NRTA) in the Katanga province of the Democratic Republic of the Congo (DRC) occurs. Once the investigation is complete and outcomes have been drafted, solutions to avoid similar future tragedies will be actioned.

Photo: Fleetwatch

Approximately 100 trucks were destroyed in the fire

Photo: Fleetwatch

The end result of a fire that could have been prevented

Book: History and Science of Wildfires on the Cape Peninsula

UCT Press presents Burning Table Mountain: An Environmental History of Fire on the Cape Peninsula, a book researched and written by Dr Simon Pooley, a junior research fellow in conservation science at Imperial College London.

In January 2000, two wildfires torched more than 8 000ha of the Cape Peninsula, swept through the Table Mountain National Park and burned houses and property. There were more than 120 fires in the region on that one 'fire-storm Sunday'.

The challenges faced in the Cape are shared by major cities and nature reserves in similar Mediterranean-type ecosystems in the USA, Australia and Mediterranean Europe. Wildfire has destroyed hundreds of thousands of hectares and killed people in Greece, Australia and the United States. It has become a global, and a local, research and management challenge.

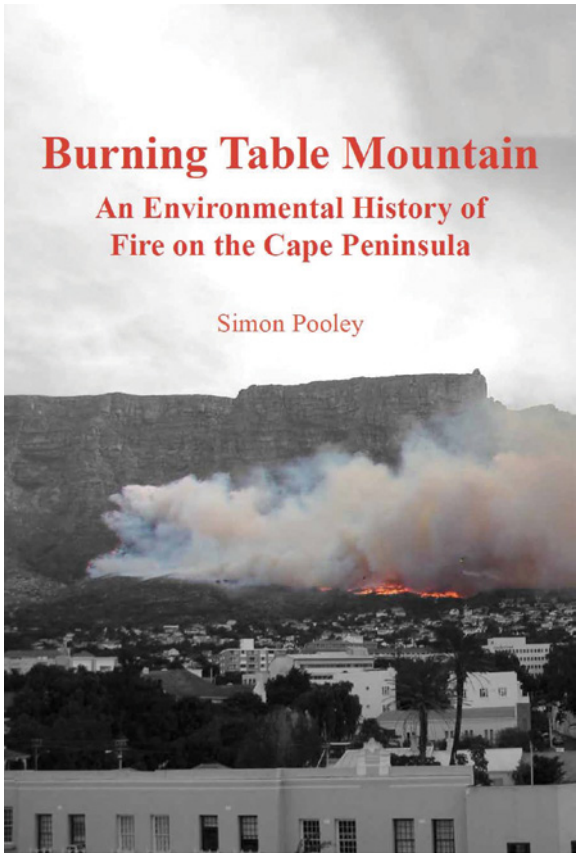
In Burning Table Mountain, the author tackles the environmental and social challenges of fire management on the wildland-urban interface of South Africa's Cape Peninsula, where a United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Site for Nature protects the unique fynbos vegetation and incorporates the iconic Table Mountain and abuts the suburbs, townships and informal settlements of South Africa's parliamentary capital. He combines narrative history, innovative use of a wide range of sources, descriptive statistics, a detailed understanding of the history of ecological science in the region and the role of fire in fynbos ecology, to provide the first integrated history of wildfire and its management on the Cape Peninsula. He reflects on the need to use a holistic approach to understanding the range and conjunctions of causes that conspire to cause large fires and increase fire incidence over time.

This book will demonstrate the contribution environmental history can make, through combining scientific and social approaches, to understanding past environments and managing the environment today. It is a seminal contribution to a neglected area of South African history but also offers an important contribution to global histories of fire.

Contents

Chapter 1: Prehistory of burning
An overview of fire at the Cape prior to 1900.

Chapter 2: Fynbos and fire – science and the history of the science
How we got to the current understanding of fynbos (ending with a brief note on what that is, and a botanical profile of the Cape Peninsula).



Chapter 3: Cape Town in the 20th century
The development of the city and its infrastructure, with analysis of how this altered the fire environment

Chapter 4: The people and the mountain
Table Mountain as a symbol for Cape Town and South Africa, and different forms of its 'ownership'.

Chapter 5: Afforestation, invasion and fire
The history of the afforestation of the Peninsula with exotic species and the ensuing biological invasions.

Chapter 6: Population and socio-economic causes
The contested influence of population growth and socio-economic impacts on increased fire incidence.

Chapter 7: Outdoor recreation
Its role as a major cause of the increase in wildfires.

Chapter 8: Cape Peninsual fire management history
An integrated history of direct wildfire management including fire fighting across the century.

Conclusion

A review of the major arguments of the book, drawing out the lessons and consequences for fire management today.
About the author

Book details

Burning Table Mountain: An Environmental History of Fire on the Cape Peninsula by Simon Pooley
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The VWS annual open day proves to be a success

Photo: Patrick Ryan and John Murray

Volunteer Wildfire Services crew line up for action

The Volunteer Wildfire Services (VWS) held its annual open day at the Newlands Station in Cape Town, South Africa, on 29 November 2014. Recent fires that took place on Signal Hill and Glencairn Heights sparked an interest, resulting in the VWS open day being a success.

Photo: Patrick Ryan and John Murray

Volunteer Wildfire Services doing what they do best

The annual open day is an important fundraising event for VWS as all funds raised are assigned directly to VWS operational costs in order to provide training and equipment for members, as well as maintaining vehicles for trooping members to and from the fireline. The funds allow VWS to do what they do best, combating wildfires, protecting property and helping secure valuable water resources. While VWS open day also aims at creating awareness, it is a great chance to have a fun-filled family day, all the while supporting a great cause.

Approximately 150 members from three stations, Newlands, South Peninsula and Jonkershoek, pulled together to do what they do best – work as a team! Entities participating in the event ranged from SANParks, City of Cape Town Fire and Rescue Services, Table Mountain National Parks, CP Contractors, FFA aviation and Working on Fire (WoF) ground forces.

With a large variety of activities for the children to do, there was non-stop action and the fun, laughter and excitement was tangible. Some children tried to complete all the activities, while others attempted just a few. Among these were tug-of-war, abseiling and snake displays; as well as trying out the fire fighting equipment, climbing inside helicopters and enjoying a ride on a fire truck. Once they completed their activities they posed for a photo with the 'fire chief' and graduated as honorary fire fighters for the day.

While the kids' activities continued, the food court was a constant buzz. The demand for pancakes, popcorn, boerewors rolls, cool drinks and snacks was never-ending.

The highlight of the day was the fire fighting displays. Seeing the Working on Fire helicopters close-up in action was exhilarating, not only for those who attended the open day but also for

those who work closely with them daily. The new recruits demonstrated some wildfire fire fighting techniques, while smoke was rising ominously from the bushes and the choppers flew water bombing runs, sometimes wetting down the hot crew and crowds.

As per tradition, the day ended with a foam party on the helipad. Soon the helipad was a mass of white foam with children dancing around and washing off the dirt that they had accumulated during the day.

Open day had exceeded expectations and the annual event was once again a tremendous success.

Sponsors of VWS open day included Table Mountain National Park, Messaris, Peninsula Beverages, Pick n' Pay, Westerfod High School, Greeff Properties, Associated Printing, Woolworths, Blend Eventlife, Uncanny Foods, Sir Juice, Cape Cup, South African Breweries Limited (SAB), Fairest Cape Fresh Produce Market, Atlantic Athletics Club and Cape Reptile Club to name a few.

"Thank you to everyone who came out and for the support that was shown, we are immensely encouraged by your kind words and generous donations. When you see a fire on the mountains around Cape Town, know that we are up there supported by your generosity," says Louise Keegan, a Newlands VWS member and member of the VWS open day organising committee.

Photo: Patrick Ryan and John Murray

Chopper takes off for demonstration

As per tradition, the day ended with a foam party on the helipad

Photo: Patrick Ryan and John Murray

Photo: Patrick Ryan and John Murray

Hose drill time

WoF demonstrating at the VWS open day

Photo: Patrick Ryan and John Murray

Children at the VWS open day were shown around the City of Cape Town Fire and Rescue Services fire truck

The ancient City of Cape Town fire truck and VWS members

Aerial apparatus operations:
placement of aerial apparatus at structural fires

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

There is probably no other piece of equipment in structural fire fighting that dominates an incident as the aerial apparatus

There is probably no other piece of equipment in structural fire fighting that dominates an incident as the aerial apparatus. It can provide the elevated water stream or rescue platform, which can turn the tide when no other options exist. It can also move fire fighters into areas where they are needed rapidly. I like to think of it (in boxing terms) as the left hook that wins the fight.

So why do we need aerial apparatus?

Aerial apparatus in their different configurations provides a number of tactical fire ground options that include search and rescue, ventilation, entry, checking for fire extension, laddering, salvage, overhaul, elevated master streams, lighting and utility control. It can also be used as a platform for incident commanders to get a bird's eye view of the incident.

Unfortunately, due to the high running costs of these units, many services are reluctant to include them in their first response plans. In virtually all my previous articles discussing structural fire fighting operations, I have advocated a balanced fire attack. This requires that the aerial apparatus forms part of the initial response to most structural fires. Many departments in this country spend huge amounts of their budgets to acquire an aerial device only for it to be left in the station during most structural fire responses and then only called when the on scene incident commander feels that it is needed. This practice precludes the fire fighters to initiate a supported interior attack and will almost always result in the aerial unit being deployed while the fire is at an advanced stage. The area normally reserved for the placement of the aerial will almost certainly be clogged up by other units and hose and force the operator to site the vehicle in a compromised position.

Don't be the kind of department who are known by the saying of: "When the ladders go up, the walls come down".

Aerial apparatus placement

The first incident commander on scene will be the officer on the first-in engine company. The first arriving engine company should make a point of driving past the fire building and try to stage on the furthest side of the structure. This allows the incident commander to have a quick, three-sided view of the building and have a good look at the surface on which the aerial apparatus will be placed.

The front of the fire building should be the domain of the aerial truck. This does not necessarily mean that the vehicle should be placed in the front of the building but that it should be able to effectively reach the front of the building. If there is a possibility of structural collapse, it might be a good consideration to place the vehicle on the corner of the building. Always consider the possibility of further structural collapse. Make sure that if this risk exists, your aerial truck should be sited outside the potential collapse zone. The positon of the aerial device must ideally be the most advantageous for getting rescuers, elevated water streams and other specialised truck company functions into position. Remember that the flexibility of the aerial device is limited to the length of the ladder or the reach of the monitor. Pumpers can always extend their hose lines if they are placed further away than what they would like.

Modern aerial devices are not limited by the restrictions of their predecessors, which needed a flat surface to be set up on. The stability features on modern aerial trucks are more forgiving and provides the operator with a less limited range of placement options. The officer responsible for siting the unit must however take all the restrictions in mind before guiding it into position. Overhead power lines, the structural collapse zone and the potential fire spread will all be factors to consider. It should go without saying that outriggers must always be placed on a solid surface. It sometimes happens that fire hose are dragged around outrigger pistons causing minor scratches on these pistons resulting in further damage to the seals of the hydraulic system. Fire fighters must take care to prevent this from happening. ▶

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Ladders are designed to be at their strongest when they are unsupported

- It is important that all units train together to understand the ideal placement of resources on various fire incidents. This includes the fire fighters crewing the supporting units. Everyone needs to know where the ladder truck will be placed on the fire ground and what it will be doing.

  Aerial apparatus have two primary functions; rescue and fire attack. Saving lives will always be the first consideration of any incident commander. The initial placement of the aerial apparatus must therefore allow it to reach potential victims at various points on the structure. It must also be placed in so that it can allow fire fighters to perform those activities that will support the rescue operations such as ventilation, forcible entry and structural search.

  The term 'scrub area' refers to the surface area of a building that can be reached by the aerial. It is obvious that your vehicle placement must be so that it has a maximum scrub area. Depending on the type of aerial device you have (mid-mount or rear mount ladder) you will have to ensure where the optimum siting position will be.

So who do you rescue first?

The screaming person at one window might not be in as much trouble as the silent person in another window or the one you can't see due to the heavy smoke column. The rescue sector officer must take all the factors into consideration before deciding who to rescue first. This will include the proximity of the victims to the fire, smoke and condition of the building. Also consider other options. A large number of people might not be able to be rescued quickly and it might work to get hose teams into a position where they will be capable of cutting the fire off from these victims. Aggressive positive pressure ventilation might also be an option. Certain victims might be able to be rescued by interior teams and taken out of the building through the staircases. Good communication between the interior teams, aerial apparatus and incident commander is imperative to ensure that all viable victims are rescued.

Someone who is in radio contact with the turntable operator should constantly keep a lookout for people who could suddenly pop up at any window in the building. The operator must then be able to get the ladder/platform in position quickly.

When approaching a victim, the ladder/platform should be raised to above the opening and then lowered to the level of the victim. This should prevent the victim from attempting to jump out of the opening towards the ladder/platform. When getting close to the victims, shout out to those in a clear voice (remember there will be a lot of other noise) exactly what you expect them to do. They will be in a severe state of panic and you should ensure that each move made by them should be careful and deliberate.

Before allowing anyone on a ladder, make sure that it is in position and no longer moving. There are many documented accounts of limbs being caught in moving ladder rungs and causing severe injury, as well as taking the ladder truck out of the fire fight during an often life critical period.

I can't stress enough the importance of taking the time to get to know the buildings in your station area. Knowing where the sleeping areas in a large apartment block are, will guide you in deciding where to site your aerial truck and might buy you valuable seconds when the life risk is high.

Fire attack

The main purpose of the aerial platform will be to provide an elevated, high-volume water stream for exterior attack. In some cases an interior attack may already have started and the ladder truck might have to be employed in support of the interior attack. This will include ventilation or provision of access for fire fighters to the upper floors.

An elevated master stream has the advantage of eliminating difficult hose lays up stairwells and can provide a standpipe capability where none exist. A misdirected master stream can also, however, disturb the ventilation process. To prevent this from happening always give constant attention to the overall prevailing conditions and communicate with the ventilation team.

Elevated master streams are generally used defensively to contain the fire, attack the exterior of the building and provide exposure protection. A solid or straight stream is the tool of choice for this function and this must be used to attack and penetrate the seat of the fire. Due to the limited access the elevated stream might have to the fire, care should be taken not to spread it into the unburned area. When more than one elevated stream is in operation, operators must be careful not to strike another device by accident.

When you are providing water to the interior teams through the ladder/platforms and their hoses are connected to the outlets on the ladder, you must accept that you have tied your resource to this activity and will

not be able to use it for anything else. If there is a possibility that people might need to be rescued or other activities might need to be carried out, you might need to employ a second truck or provide water through other possible methods. I am not a great advocate of using the aerial apparatus as an elevated hydrant while other activities also have to happen. However, I would not specify an aerial device without any outlets as you may have to respond on occasions to incidents where this feature could be of great value. I recall as an operations officer having a chipboard manufacturing plant in my station area. It was a thankless task hauling many lengths of hose up to the top of the silos every time we had a fire there (which we had often). That was until our new 35-metre ladder truck arrived and we were able to spot the platform right next to the elevated walkway and extend our hand lines from there. Then being a fire fighter became fun again.

The positioning of the aerial truck could be very different for fire attack than for rescue. This must be taken into account by the fire operations officer. The rule of thumb for placing your aerial apparatus should be:

- Maximum stability
- Best climbing angle
- Adequate extension capability
- Consider the condition of the fire building

Using the ladder

Older aerial ladders needed to be operated largely over the chassis of the vehicle where it was at its most stable. This severely limited the ability of the ladder to move in multiple directions during complex incidents. The large number of safety systems on modern apparatus has largely negated this exception (some of these systems are discussed later).

Some people are still of the opinion that resting the tip of an extended aerial ladder against the side of a building will provide extra stabilisation to the ladder. The facts are as follows:
1. You have no idea of knowing what the stability of the wall is against which your ladder is resting; you also don't know if the force you are exerting against the wall will cause it to be compromised further and collapse.
2. Ladders are designed to be at their strongest when they are unsupported and by placing torsional stress on the aerial you are going against the manufacturer's recommendations. This is one of the leading causes of aerial ladder failure.

Also ensure that you are not placing your ladder too close to the top of the surface onto which the fire fighters have to climb onto. Sure it is easier for an equipment laden fire fighter to be as close to the roof or windowsill but the climbing actions will cause the ladder to bounce and continuously bump against the structure.

Never shock load the ladder by attempting to jump onto it from any distance irrespective of how small it might be.

When moving personnel up and down the ladder, take care to prevent utilising it at excessive horizontal and vertical elevations. Almost all of the modern ladders can work at low elevations and even at negative angles, which is particularly helpful during rescues from below surface positions. Consult your vehicle manufacturer's recommendations and load chart. Don't exceed 70 percent.

Ventilation

Getting a ventilation team to the roof of a building can many times be achieved best by moving them up there with your aerial apparatus. Most hydraulic and ladder platforms allow for the cage to be tilted at an angle parallel to the roof angle. By using this feature of the platform, the ventilation team could move slowly over the top of the structure testing the stability of the roof from the safety of the platform cage.

When the crew is ready to ventilate, the cage operator should move in as closely as possible. A fire fighter tethered to the cage should then use a ventilation saw to make the horizontal cuts. If space allows, the vertical cuts should be made by an additional fire fighter before the final (bottom) horizontal cut is made. This cut should not be complete and a small bit of the roof should be left intact to prevent it from falling into the building completely. Moving the cage back, one fire fighter should then use a ceiling hook to rip away the last bit and allow the fire to vent a safe distance away. Should you still have a ceiling in place, use the ceiling hook to tear this open. Most modern platforms are fitted with an airline system whereby tanks situated along the sides of the ladder provide air to outlets in the cage. This negates the need for fire fighters in the cage to wear bulky self-contained breathing apparatus' (SCBAs) and allows for greater ease of movement.

As mentioned in a previous article on ground ladders, when you are using the aerial ladder to place fire fighters on a roof make sure that the end of the ladder extends above the roofline. This allows the fire fighters to access the roof rapidly and also allows them to see the lights on the end of the ladder in conditions of limited visibility.

The National Fire Protection Association (NFPA) specifies a range of ground ladders to be carried on an aerial device. At least two of the ground ladders should be hook ladders. When you are operating on a pitched roof with a straight stick, you might experience problems reaching certain points. Make provision then for hook ladder to be used in steep angles.

Ventilating while standing on the aerial ladder is possible and has the ▶

Many ladder trucks now feature LED rung lighting

Rustenburg Fire Department

Rustenburg Fire Department with MMC SBM Mhlungu, Segale Pawpaw Kotsedi, CFO Mfolwe; Antoni Oor and Oupa Khumalo

Fire and Rescue International (FRI) visited Rustenburg Fire Department and were treated to a flag raising ceremony and parade performed by the fire service and traffic department and several demonstrations including a motor vehicle accident (MVA), vehicle fire, extrication and a hazardous materials (hazmat) incident.

We were joined by member of mayoral committee (MMC) SBM Mhlungu, MMC for public safety; Segale Pawpaw Kotsedi, director of public safety; chief fire officer, BE (Ephraim) Mfolwe; chief of traffic, Antoni Oor; Frans Heystek, disaster management coordinator; Oupa Khumalo, unit manager for law enforcement and security; Moses Setshogoe, divisional officer: operation; Tumisang Seleke and Obakeng Kgaladi, both of public safety.

MMC Mhlungu said that there are four divisions that comprises public safety ie, emergency services and disaster management, traffic, law enforcement and licensing and testing. The MMC added that the profile of public safety is an important one and as such receives political support. Director Pawpaw Kotsedi added, "The willingness of the community to participate and our reputation is our strong point. Our biggest strength lies in the political backing and support we receive from our directorate." Oupa Khumalo commented on the marked reduction in security incidents, "The installation of the closed-circuit television (CCTV) system, assisted in crime reduction within our city centre."

- advantage of allowing ventilation teams to do their job without putting any weight on the roof. The ladder must never be extended or retracted while this is happening.

In closing: new innovations

I recently had a discussion with a friend who has been in the fire truck manufacturing business for a long time. He expressed the concern that despite the many improvements made to aerial apparatus over the last number of years, almost 80 percent of the vehicles currently used in this country were commissioned before most of these innovations happened. Considering that most of the decision makers will not even dream of driving a car without all of the modern safety systems like airbags, seatbelt pretensioners, crumble zones etc (even air conditioning is seen as a necessity), it is amazing to think that they have no problem in allowing their fire services to ride in vehicles that still have technology from a decade (or longer) back.

Aerial platforms are now capable of flowing up to 7 500 l/min through either a single or dual monitors. A system of 'short jacking' makes it possible to deploy both jacks in a confined area where in the past it wouldn't be possible to site the apparatus due to lack of space.

Advanced electronics now monitor and provide critical data relating to breathing air status, flow rates and pressures, rung and ladder alignment, active load ratings on a chart with life time rating, extension and reach, sensor read out to avoid collisions between the ladder and the cab, etc.

Lighting on aerial platforms has also improved hugely and many ladder trucks now feature LED rung lighting thereby lighting all the rungs and side rails for night time operation. Rungs are now also fitted with luminescent covers for greater visibility at night.
Aerial apparatus now also have much higher load ratings with platforms that can accommodate 1 300kg and straight stick ladders with weight ratings of 1 200kg. Stability has also been improved to the extent that it can withstand winds of up to 80km/h.

Many qualified operators of aerial devices will tell you of their difficulties in preventing the platform from jerking, following a sudden or harsh input. This problem has also been overcome in modern ladder trucks by the introduction of soft touch controls, which prevent all vibrations and jerking when coming to a stop.

A final innovation I found especially impressive is the 'auto-bedding' function, which allows for the stowing of the ladder with the engagement of a single switch.

The features mentioned here provide for a safer, quicker and ultimately more effective utilisation of this vital piece of equipment. I might sound like a car salesman but in my opinion there has never been a better time to buy one than now.

Fire service

Situated in the North West Province of South Africa, Rustenburg Fire Department has its headquarters in Rustenburg, headed up by chief fire officer (CFO) Ephraim Mfolwe. There are three fire stations, two of which have been built but are not yet operational due to insufficient resources.

The fire service has been serving the community of Rustenburg for about 68 years and services an operational area that covers 3 500km2 with an annual capital budget of R6 143 000 for the 2014/15 period (R12 269 369 for 2013/14) and an operating budget of R 27 376 987 for the 2014/15 period (R21 780 943 in 2013/14).

The demarcation of municipal boundaries in 1994 made provision for the expansion of municipal borders. Hence, Rustenburg Fire Department now services 38 wards comprising of urban, peri-urban and rural areas. The main headquarters has been situated on the corner of Nelson Mandela and Bethlehem Drive in Rustenburg for the past 30 years.

History

Rustenburg Fire Station was founded during 1947 and was run by the then town engineer, Bardley Laubscher, a volunteer. In 1974, Koos Slippers was appointed as a station officer to manage the station until 1978 when chief fire officer (CFO), Izak de Vries Schoombee, a first generation fire fighter, was appointed.

The new fire station was built on the corner of Nelson Mandela and Bethlehem Drive and was officially opened on 3 November 1985 by the then mayor and a panel of councillors. The station service area was only a radius of three kilometre diameter from the central business district (CBD).

During 2000, CFO De Vries Schoombee retired and the assistant chief fire officer, Danie Byleveldt, assumed acting capacity. Byleveldt retired in 2002 due to a medical condition after which divisional officer Johannes Abraham Greyling continued in an acting capacity until 15 May 2003, when chief fire officer BE (Ephraim) Mfolwe was appointed to lead the service to date.

Organisational structure

The Rustenburg Fire Department is currently operating on a structure approved in 2007, which limits its service ability as the region has undergone a major growth spurt since then.

A new structure has been proposed to relieve the immense stresses of being under staffed and the lack of resources. The new structure addresses the various challenges and limitations imposed by the current structure and allows for two additional fire stations. The new structure has not yet been implemented due to budget constraints.

Fire brigade reservists and current resources have been considered for reallocation to the new fire stations to provide the much-needed service.

Area of service and challenges

Challenges faced by the fire department have been impacted ▶

An inspection followed the flag raising ceremony

Rustenburg Fire Department's building

SB Molefe, DS Setshedi, MM Setshogoe, BE Mfolwe, O Khumalo, Cllr LP Maqwane, Cllr SBM Mhlungu, Kotsedi Segale Pawpaw, Antoni Oor and M Maloleka

Call centre staff Tefo Mpete, MapuleMpuru, TM Dube, Paul Oberholzher, supervisor and in the front, Itumeleng Resengane

Vehicle fire

Stabilising the 'patient'

Preparing for the multi incident demonstration

The hazmat demonstration

upon by the expansion of the municipal borders. A marked increase in fires, floods, drownings and other rescue activities has been experienced. The major challenges limiting effective and professional fire and rescue service to the community include shortage of resources ie personnel and equipment, inadequate decentralised fire stations to cover the operational area, lack of budget priority, inadequate personnel development, an ageing fleet and scant replacement program and an insufficient compliance with the SANS 10090 – community protection against fire.

Decon unit

The formal urban settlements with a structured layout are serviced with a full range of municipal services and the settlement households can obtain security of tenure. These include areas such as Rustenburg, Tlhabane, Boitekong, Rankolenyane, Phatsima, Hartbeesfontein, Kroondal and Marikana.

The tribal settlements are mainly located on Bafokeng tribal land and the households living in these settlements are considered Bafokeng citizens. Although these households do not own title deeds, they have security of tenure through their association with the tribe and are characterised by varying levels of service. Settlements that fall within this category include areas such as Phokeng, Kanana, Luka, Chaneng, Tlaseng, Thekwane and Photsaneng.

Rural settlements are similar in nature to the tribal settlements with regard to the residential densities and functions but they are not located on tribal land.

The informal settlements have mainly developed along the mining belt. These include areas such as Wonderkoppies, Nkaneng, Zakhele, Popo Molefe and Freedom Park. The informal settlements are characterised by a lack of security of tenure and a lack of basic municipal services. Some of these settlements are in the process of being upgraded or relocated.

Access to these areas is of serious concern since impacting on the weight of response by the Fire department in case of rescue or fire fighting.

By attending conferences, fire service seminars, networking and benchmarking research of best practices the service keeps up with the evolving fire industry and attempts to

stay abreast of changes and advances in the industry and internationally.

Risk profile

Its risk profile includes two major hazard installations (MHI) ie Sasol Nitro situated at Anglo Platinum (explosives) and the BP fuel depot in Rustenburg East. Other risks in its area include major mining operations and manufacturing, heavy industry, the mushrooming of informal settlements and the establishment of settlements on flood lines.

This stretches and depletes available resources, compromises community relations due to the reduction in response times and strains the available budget for example overtime.

Two major dams within its area, Bospoort and Vaalkop dams, also poses a risk but as Rustenburg doesn't have its own water rescue unit, the SAPS assists with water emergencies. The fire service does, however, have six class four divers.

Operations

Rustenburg's current area of available expertise includes structural fire fighting, wildfire fighting, hazardous material response (hazmat), swift water rescue and high angle rescue. There is a critical need to increase the number of skilled personnel.

Most commonly the service responds to motor vehicle accidents (MVAs), structural fires in both formal and informal settlements, wildfires, hazmat spillages, water rescues and transformers fires.

Disaster management support on mitigation and recovery during disaster related incidents also form part of the department's competencies. Other services rendered include water rescue on the dams, rivers during floods, humanitarian services and the provision of emergency water supply in critical institutions like, hospitals, schools, old age homes etc.

The biggest incidents attended to by the service included a railroad accident where the released product (diesel) was flowing and burning, contaminating the nearby river and dam. Recovery of the product and rehabilitation of the environment took three weeks. Another major incident was an urban search and rescue response in the Magaliesberg Mountain range, which took three days to conclude where other search and rescue teams from other institutions were called in to assist. Other notable incidents include the control and cleaning of a fuel spillage on the road that covered about three kilometres and a fire at the Impala number 20 mine shaft the shaft was on fire.

Equipment

The current fleet is aging rapidly and the need for replacement of essential apparatus and equipment has become a critical issue. Specifications for new apparatus have already been drafted in numerous plans to enhance service delivery, which will include large water carrying capacity space for fire fighting and rescue tools and equipment.

Fleet

Type	Age	Capacity	Application	Total km Traveled	Condition of Vehicles
FMC	1980	3,5k/	Rescue pumper	51 243	Bad
Unimog	1987	3k/	Grass Unit	28 202	Bad
Ford Courier	1991	2 seater	Diving crew unit	55 956	Workshop
Toyota	1987	2 seater	LDV -	305 156	Workshop
Nissan tanker	1997	10k/	Fire tender	97 130	Satisfied
Nissan tanker	1997	10k/	Fire tender	89 991	Satisfied
Opel Astra	1996	5 seater	Sedan - fire prevention	138 918	Fair
Nissan Sentra	1996	5 seater	Sedan - fire prevention	155 750	Fair
Nissan Sentra	1996	5 seater	Sedan - fire prevention	125 581	Fair
Toyota Venture	1999	7 seater	Disaster crew transport	79 006	Fair
Mercedes Sprinter	2004	3 seater	Rescue unit	58 506	Good
Mercedes Atego 1528	2010	3k/	Rescue pumper	27 475	Good
Mercedes Axor 1828	2011	2k/	Combination aerial pumping appliance CAPA	3 753	Good
Hazmat vehicle	2005	2 seater	Hazmat unit	10 127	Good
Colt 4x4	2005	5 seater	Disaster crew transport	96 687	Good
Nissan 4x4 D/cab	2005	2 seater	LDV - crew transport	135 866	Good
Land Rover	2007	600/	Grass unit	10 033	Good
E-One International	2008	4000/	Rescue pumper	14 387	Good
Nissan 4x4 S/cab	2005	5 seater	LDV - crew transport	123 961	Good
Nissan Tilda	2007	5 seater	Sedan - fire prevention	114 514	Good
Nissan Tilda	2007	5 seater	Sedan - training admin	128 711	Good
Toyota Quantum	2008	12 seater	Student carrier	49 250	Good
Isuzu D/cab	2012	600/	Grass unit	19 596	Good

Frans Heystek

Martin van Niekerk, DS Setshedi, MM Setshogoe, CFO BE Mfolwe and CT Chauke

Staff

The total permanent staff complement includes 40 professional fire personnel, three people in senior management, two control room staff members, three people in disaster management and 12 support staff members. Fire brigade reservist data is also available and updated.

The majority of members are multi-skilled and interchangeably perform functions as the need arises. All 40 professional fire personnel are skilled in fire, rescue and hazmat, six members are hazmat technicians, six possess class IV emergency diving skills, four are skilled in fire safety and six members are competent fire fighting instructors. There are six female fire fighters.

Rustenburg operates on a four shift system ie seven days day shift, seven days night shift, seven days, stand by and seven days off.

The available staff still needs to be developed in a number of programs for example in urban search and rescue (USAR), high-angle rescue, swift water rescue, structural collapse and in supervisory and management skills.

Rustenburg's recruitment policy requires physical fitness to meet the assessment requirements (endurance test), recruits must be 18-years old, with a Matric (Grade 12) or equivalent certificate, a valid driver's license, a fire fighting related Qualification (NFPA 1001), be disciplined and with the ability to perform duties in extended hours.

Training

Internal training in the form of physical exercises is done once a week while other training is done as the need arises and budget availability. Fire fighting related training facilities are available inhouse but USAR, high-angle rescue and swift water rescue training is outsourced.

Fire safety

The fire safety awareness program includes presentations and demonstrations during station visits by schools and the community. The Public Information and Education Relations (PIER) program will be commenced in the near future.

Fire safety challenges faced by the department include insufficient resources ie skilled personnel and equipment, budget constraints, code enforcement in general and the need for extensive awareness of fire prevention and enforcement to both residents and the business community. The involvement or total coordination with other municipal and or government departments on approval of developments and the standardisation of fire brigade by-law/s particularly with the neighbouring or border municipalities also poses an impediment. The issue of summons and warrants and fire investigation constraints also imposes of the department's fire safety challenges.

Statistics

Average over a three-year cycle:
Population: 549 575 (2011 Census)
Size of area covered: 3 423km2
Emergency calls: 636

Incidents

Number of MVAs: 59
Fires (total): 440
Structural fires (formal): 38
Structural fires (informal): 42
Industrial fires: 18
Wildfires (including veld and plantation) fires: 77
Vehicle fires: 33
Other fires: 51
Hazmat incidents: 11
Swift water rescues: 2

Interagency involvement

The local disaster management centre is located on the same premises and is managed by the chief fire officer. An office space is also allocated for the local fire protection association (FPA) and CFO Mfolwe is also the fire protection officer (FPO).

When asked about comments for fellow fire stations, Chief Mfolwe said that the provision of fire services plays an integral part in the sustainability of growth of the city and its local economic development. The fire service is one of the most costly departments in a municipality so it must ensure functioning and the probability of revenue generation is adequate.

"Please exercise total responsibility and passion for service delivery through optimal utilisation of the service's limited resources," CFO Mfolwe concluded.

Meet chief fire officer, Ephraim Mfolwe

Chief fire officer (CFO) Ephraim Mfolwe was appointed on 15 May 2003 to lead the Rustenburg Fire Department after a career that started in 1983 as a trainee fire fighter at Sun International. FRI spoke to CFO Mfolwe to find out what made him choose fire fighting as an occupation and we share the challenges faced during his career path.

"I chose to become a fire fighter when I left school and developed a passion for the profession," stated CFO Mfolwe. "I now have over 32 years' experience and still love what I do on a daily basis. It's in my blood to serve," added Mfolwe.

Career timeline

- **1983** – Trainee/junior fire fighter (Sun International)
- **1984** – Fire fighter
- **1985** – Senior fire fighter
- **1986 – 1987** Leading fire fighter
  Station officer (Mafikeng City Council Fire Dept)
- **1988 – 1990** Station officer and managing the Station
  Acting assistant security manager (Sun International)
  Fleet manager (Sun International)
  Safety manager (Sun International)
- **1990 – 1993** Instructor for basic ambulance courses (BAC) and general first aid
- **1994 – 1998** Station manager (Zeerust/Lehurutshe)
- **1999 – 2003** District chief fire officer, fire protection officer for local FPA (Central District Municipality)
- **15 May 2003 – to date**: chief fire officer at Rustenburg Local Municipality (2005 acted as head licencing)

"During 1987, about four years after being in the service, I realised that I have what it takes to be a chief fire officer and programmed myself that nothing is impossible. During that period, there were very few of chief fire officers at my age and race within the country and a grabbed the opportunity," added Mfolwe. "Many people in this field of work were either less educated or illiterate and I wanted to be amongst those who achieved the best in leadership of this fraternity."

Mentors

A first generation fire fighter, Chief Mfolwe noted the people who were instrumental mentors during his career, mentioning in particular the late CFO Sarel Hills of Sun International, who instilled a culture of further learning, studying, self-development and seizing opportunities that cross his path. "He also encouraged my sense of leadership," said Mfolwe.

Other people that had an impact on his career included Kimberley's CFO Tinus Pretorius, who not only mentored Mfolwe on total leadership focusing on fire service management. But also on incident management and political leadership vis fire services, understanding personnel development, management and optimal resource utilisation.

Both CFO Flip van Staden of Potchefstroom and CFO Hendrick Bezuidenhout of Vryburg played a pivotal role in mentoring Mfolwe in the application of legislations and standard operating procedures (SOPs). They also showed Mfolwe the importance of the fire service fraternity including execution of field and administrative instructions.

"Director SS Kotsedi of Rustenburg Local Municipality Public Safety Directorate mentored me on public participation and mobilisation and issues of governance and public liaison. He also guided me on intergovernmental relations and departmental financial acquiring to ensure enhancement of service delivery with optimal financial resources. Matters of safety and security impacting on strategic management of the department and matters relating to conflict management as well as events safety management formed part of his mentorship," added Mfolwe.

Management style

When asked about his management style, CFO Mfolwe ascertains that his is a democratic management style with

Chief Ephraim Mfolwe

autocratic influences. He believes that his management style must assist in the maintenance of discipline and instilling ownership in employees to their job and with the applicable resources available.

The love and passion for the service and the different challenges that nourishes his intellectual ability and growth was cited by Chief Mfolwe. "I firmly believe that serving in this industry requires a calling and I always wanted to fulfil my calling and to give the best in me by protecting, preventing and guarding every neighbour's property and preserving the life. I also want to add positive value to service delivery," said Mfolwe.

When asked about advice to fire fighters and future fire chiefs, Chief Mfolwe answered passionately, "Love your job and be proud of what you are; preserving life in any means. Ensure supporting each and everyone around to collectively have common understanding and together you will achieve the best," he said. Mfolwe added that every kind of resource ie human, finance, infrastructure or equipment, is deemed valuable for the safety or preservation of life and the surrounding environment. "Every employee, irrespective of skill, education, culture or creed, is critically important to nourish your leadership skills since you will learn being exposed to different cultures, viewpoints and different expertise."

In sharing his thoughts with fellow CFOs, Chief Mfolwe concludes, "Do not underestimate the power of sound, take everything serious and act timeously in the manner it deserves".

Incident typing

By Reinard Geldenhuys, chief fire officer, Overberg District Municipality

Incidents are typed according to five levels of complexity

In previous articles we dealt with the establishment of the incident command system in South Africa and the rollout of the system. As the system grows, the need to formalise interpretations increases.

In the good/bad old days we use to have the old Civil Defence exercises. More often than not in some small town in the rural areas we would simulate a taxi or small bus incident with ten patients and that would constitute a disaster or in today's terms a 'major incident' for that town. The same incident in a metropole like Cape Town or Tshwane, it will just be another incident for the day.

The name of the acts and our approach have changed since those days but the incidents remain the same and the perception and description of the size, intensity and seriousness of incidents remains subjective to the available resources to deal with that incident.

Therefore, the need for a standardised classification of incidents arose stronger and stronger. The South African Incident Command System (ICS) Workgroup adopted the following classification and typing of incidents based on the five levels of complexity in order to make decisions about resource requirements:

Type 5

- The incident can be handled with one or two single resources with up to six personnel.
- Command and general staff positions (other than the incident commander) are not activated.
- No written incident action plan (IAP) is required.
- The incident is contained within the first operational period and often within an hour to a few hours after resources arrive on scene.
- Examples include a road shoulder fire, vehicle fire, an injured person, etc.

Type 4

- Command staff and general staff functions are activated only if needed.
- Several resources are required to mitigate the incident.
- The incident is usually limited to one operational period in the control phase.
- No written incident action plan (IAP) is required but an incident organiser MUST be filled in

Type 3

- When capabilities exceed initial attack, the appropriate ICS positions should be added to match the complexity of the incident.
- Some or all of the command and general staff positions may be activated, as well as division/group supervisor and/or unit leader level positions.
- A Type 3 incident management team (IMT) or incident command organisation manages initial action incidents with a significant number of resources, an extended attack ▶

Incident typing assists with decisions about resource requirements

INTERNATIONAL INCIDENT COMMAND SYSTEM TRAINING

Working on Fire Training in collaboration with the SAICS Working Team and USA instructors (experts in their field) will be presenting the following courses in February and March 2015

Course Title	Course Details	Date, Location & Tarrif
Incident Command System: Basic	To provide personnel with the background information required to operate efficiently during an incident or event within the Incident Command System (ICS).	24 th to 26th February 2015 Bloemfontein R 3 900 Excl. VAT per participant
Position Specific - Logistics Section Chief	To provide local and provincial-level emergency responders with a robust understanding of the duties, responsibilities and capabilities of an effective Logistics Section Chief (LSC) on an All-Hazards Incident Management Team. These responsibilities fall into two categories: Logistics Section Chief Duties: (1) responding to the incident, and (2) effectively fulfilling the position responsibilities of an LSC on an All-Hazards Incident Management Team.	2nd – 6th March 2015 Bloemfontein R 7 250 Excl. VAT per participant
Position Specific – Incident Commander Type 3	To prepare participants to manage emergency incidents, including understanding the role and functions of the command team, multi-jurisdictional agency coordination, setting healthy command climate based on clearly defined objectives, assuming and transfering command.	16th – 20th March 2015 Cape Town R 7 750 Excl. VAT per participant
Area Command	This course intended for senior personnel expected to perform in a management capacity in an area command/complex incident environment. The course provides why, when, where and how Area Command is established, and the organization, facilities, communications required and demobilisation process under an Area Command organization. It also covers the organizational relationships between Area Command and incidents, and between an Area Command and jurisdictional authorities.	23rd - 26th March 2015 Cape Town R 2 380 Excl. VAT per participant
Multi Agency Coordination	This course introduces Multiagency Coordination (MAC) Systems and shows how these systems can be used to improve incident response. MAC Systems consist of a combination of elements: personnel, procedures, protocols, business practices, and communications integrated into a common system. After taking this course, you should be able to improve the overall coordination with, and support for, incident management by developing and operating within MAC Systems.	26th – 27th March 2015 Cape Town R 1405 Excl. VAT per participant

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The assessor approach 360°
at the World Rescue Organisation

By Neville van Rensburg and Julius Fleischman, World Rescue Organisation

The WRO facilitates the dissemination of emergency rescue and medical techniques, practices and procedures

We are in a very privileged position to be given the opportunity to start the new 'Rescue Roundup' section in the Fire and Rescue International magazine and we believe that with this privilege, comes a great responsibility. We want to share the most relevant and up-to-date information, education and operational information that is available. We want to ensure that this new section 'Rescue Roundup' is accessible to rescuers of all levels of experience.

The World Rescue Organisation is an international body that incorporates

- incident until containment/control is achieved or an expanding incident until transition to a Type 1 or 2 team.
- The incident may extend into multiple operational periods.
- A written IAP is required for each operational period.

Type 2

- This type of incident extends beyond the capabilities for local control and is expected to go into multiple operational periods.
- A Type 2 incident may require the response of resources out of area, including provincial and/or national resources, to effectively manage the operations, command, and general staffing.
- Most or all of the command and general staff positions are filled.
- A written IAP is required for each operational period.
- Many of the functional units are needed and staffed.
- Operations personnel normally do not exceed 200 per operational period and total incident personnel do not exceed 500 (guidelines only).

Type 1

- This type of incident is the most complex, requiring national resources to safely and effectively manage and operate.
- All command and general staff positions are activated.
- Operations personnel often exceed 500 per operational period and total personnel will usually exceed 1 000.
- Branches need to be established.
- Use of resource advisors at the incident base is recommended.
- There is a high impact on the local jurisdiction, requiring additional staff for office administrative and support functions.

The Western Cape is already using standardised incident typing

The above incident typing is used as a standard in the Western Cape and is also taught in current ICS courses throughout the country.

It is our vision that as the ICS process is rolled out to its entirety, we will be able to match the qualification and experience level to the level or type of incident to be managed.

national rescue organisations with the view of the enhancement and maintenance of emergency procedures and techniques for dealing with road traffic collisions.

It has been created to facilitate the dissemination of emergency rescue and medical techniques, practices and procedures for the effective management of road traffic collisions and care of those involved. The application of such knowledge can save lives, reduce incidence of disability and dramatically improve long term outcomes.

The World Rescue Organisation draws on the experience of its members operating in Australasia, Australasia Road Rescue Organisation (ARRO); Canada, Alberta Vehicle Extrication Association (AVEA); Germany, Vereinigung zur Förderung des Deutschen Unfallrettungswesens eV (VFDU); Luxemburg, Luxemburg Rescue Organisation (LRO); Portugal, Associação Nacional de Salvamento e Desencarceramento (ANSD); Republic of Ireland, Rescue Organisation Ireland (ROI); Romania and Spain, Asociacion Profesional de Rescate en Accidentes de Trafico (APRAT); South Africa, South Africa Medical Rescue Organisation (SAMRO); North America, North American Vehicle Rescue Association (NAVRA); USA and Canada, Transport Emergency Rescue Committee (TERC) USA and TERC Canada; United Kingdom, United Kingdom Rescue Organisation (UKRO) and our partners to develop national bodies, the challenge concept and produce training programmes and initiatives that assist rescue and medical crews whilst working in the prehospital environment.

Working as an assessor provides the opportunity to see how world rescue teams address challenges

The WRO exists solely to save lives and reduce injuries, an objective we achieve in three ways:

- We provide training, resources and systems for rescue services in developing nations through our Developing Nations program.
- We share technical and theoretical knowledge to establish global best practice through our annual World Rescue Challenge.
- We provide for the enhancement of individual rescue skills in both member and developing nations through our Rescue Trainer Bursary program.

Successfully extricating the patient from the scenario requires a high level of skill

Why did we become World Rescue Organisation (WRO) assessors?

The experiences we have gathered from our involvement with the WRO assessment competitions in the past, we wanted to become more knowledgeable about this field for which we have such a great passion. It also benefits, in no small measure, our role as medical and rescue training coordinators.

We use various assessment processes worldwide and the WRO assessor policy model benefits us tremendously in our daily work here in South Africa.

Through our role as lecturers, we benefit our students by being able to expose them to the techniques and information that we accumulate from these competitions. Each event represents a wonderfully rich source of innovation opportunities that inspires work directed at delivering excellent service in various environments.

This is why we love working as a WRO assessors.

Challenges

Each assessment competition delivers its own challenges as each is unique in its character, deliverables, complexity and availability of resources.

Working as an assessor provides new learning opportunities in terms of seeing how the world rescue teams and the host-country have addressed challenges identified in ▶

Extrication challenges place great physical and emotional stress on the rescuers

previous events, in any given vehicle rescue scenario.

Therefore, being an assessor provides us with an opportunity to explore areas of knowledge that are being newly discovered and developed every day and allows for a learning opportunity of a life time.

Once a year across the world, fire fighters, rescuers and paramedics come together to test their skills and experience to a safe, casualty-focused rescue. These extrication challenges place great physical and emotional stress on the rescuers. Added to this, being evaluated on their competency during these events and, taking into account the rate of technological changes and developments within the motor industry, also challenges the rescuer to maintain his or her knowledge on a daily basis.

Successfully extricating the patient from the scenario requires a high level of skill, an understanding of the scenario and a lot of good training, knowledge and tool operations in order to operate in a safe and effective way.

So! The best practice for the assessment of rescue teams must involve assessing their performance in the disciplines of command, technical rescue and medical treatment of the casualty (ies) they encounter.

Depending on the complexity of the scenario a team faces, there may be one or more WRO assessors examining each discipline.

In particular, in the medical area, the WRO will make use of both interior and exterior assessors.

To oversee equity in all aspects of the challenge, from scenario construction to assessment, let us quality assure the assessor once more and substantiate the follow questions:

1. What makes a good assessor?
2. Characteristics of an assessor?
3. Abilities of the Ideal assessor?
4. Assessor attributes?

What makes a good assessor?

Everybody has a different view of a good assessor. Think of the assessors you know who dropped out. Can you learn to be a good assessor? Yes, to some extent…But just like being a good soccer player, you have to have talent, be willing to learn, and take the time to develop your skills.

Some people have talent and don't really apply it, some try hard but will never be really good and some will never get it. It doesn't mean that you are a bad person, just that you don't have the talent for assessing. You must be able to deal with uncertainty, have a sixth sense when something isn't right and never stop learning so that you can make decisions when faced with uncertainty.

There are some crucial elements that you need to incorporate into your style while you are in front of a rescuer; whether it be by the way you present yourself, or just the way by which you collect information.

All of these issues can affect the quality of the assessment and how smoothly it proceeds. A very valuable point to remember is the process by which you engage the rescuer. Consider the many extraordinary factors when assessing language, background and culture; these all play a crucial part in the final outcome. Care must be taken to value your rescuer.

Scenarios/rescuer

The assessment process and how it will be managed should be agreed upon prior to the actual assessment taking place. It may be a new assignment or it may be a repeat process. Be clear on what is required. 'May I see an example?' should be your motto.

Rescuers can be a great way of gathering information but the devil is in the details.

Don't be afraid to ask the same question more than once. I assume you know about assumptions..! Your entire job as an assessor is to gather facts and to interpret the results; no assumptions permitted. This is still important even if you are familiar with the rescue environment.

Watch out for this, especially if you are involved with the follow-up assessment process. Rescue environments change from year to year, simulation to simulation and rescue organisation to rescue organisation. Presumptions into the assessment could bite you in the end.

Try to see each assessment engagement as a separate issue. Even if you are familiar with the organisation, ask the questions to the relevant personnel (those specifically involved in the process) again and let them answer the questions. Let them do the talking.

Bottom line: You don't get any answers when you're doing the talking. Set up a list of questions that allow the rescuer to describe the

process. For example, "Can you walk me through how you would typically perform this process?" Use questions to confirm the answer at the end, eg, "My understanding of the current situation is this. Am I correct?" You want to make sure that the processes you have agreed to be as accurate as recorded.

Rescuer

Be friendly but don't be their friend. This is one of the most helpful items that I have taken to heart. As an assessor, you want your rescuer to feel comfortable.

Practice good feedback facilitation

You should always practice good feedback facilitation such as introductions, setting the tone of the assessment, good time management, and keeping proper focus on the objective. This is important to ensure that all of the necessary information is gathered within the appropriate time-frame. Keep in mind that these are all recommendations and general guidelines to an assessment process. When the actual rescue work is being performed, you are the general on the ground; remember that no successful battle plan has been followed to the letter and the battle won. Adjust to the changes within the group and environment and everything will complete successfully!

Characteristics of an assessor

- Knowledgeable
- Observant, good listener
- Confidential
- Independent
- Unbiased and impartial

Each assessment competition delivers its own challenges

First impressions

- Professional appearance
- Alert and focused
- Positive and balanced attitude, open-minded, curious and respectful
- Obviously prepared and organised
- Open and communicative
- Able to establish rapport and set the tone for an effective assessment

Assessor attributes

- Open-minded; willing to consider other points of view
- Sound judgment and good analytical skills
- Discerning; what's most important and how does it fit?
- Tenacity; persistent and focused on achieving results
- Ethical; fair, truthful, sincere, discrete
- Diplomatic
- Decisive
- Self-reliant

Abilities of the ideal assessor

- Highly functional communicator; excellent listening, speaking and written skills
- Focused
- Collaborative
- Observant
- Systematic and organised
- Prepared
- Good time management
- Flexibility within the assessment
- Adaptable to changing work assignments and conditions

Joel Biever, Luxemborg; Dr Anna Sellmeier, Germany; Neville van Rensburg, South Africa; Roger Ulnsa, Spain; shadow assessor

Communication skills

How well do you communicate?

- What is said may not be what is heard
- Choose your words carefully
- Observe how they are received
- What is heard may not be understood
- Engage in discussion to ensure understanding
- What is understood may not be accepted
- The assesse may be defensive

Communicating during the assessment:

Things to remember:

- Assesses are under stress
- No one is a mind reader
- Don't assume
- Ask open-ended questions
- Listen to the responses

Centrum Guardian Project

donation funds planned Sea Rescue eLearning First Aid course

The NSRI first aid courses get cash injection from the Centrum Guardian Project

The NSRI has a need to train the 940 volunteers every year

The Centrum Guardian Project has donated R75 000 to the National Sea Rescue Institute (NSRI) to assist with the development of eLearning courses. The NSRI are in the process of changing the way that its sea-going volunteers are trained and are switching to a combination of eLearning for theoretical modules and scenario-based training for practice modules.

The first aid section of this new method of training has been designed by NSRI CEO, Dr Cleeve Robertson, using his experience as a doctor specialising in emergency medicine.

"The course is specifically designed for NSRI crew and concentrates on maritime emergency care," said Dr Robertson. "It is a first for the NSRI and we are looking forward to rethinking the material and packaging it in a practical and interactive online module. We aim to host our first class by March 2015."

"By allowing the candidates to complete the theory online, we give them more time to focus on the practical side of the course during exercise time on their stations, which is obviously so important for our volunteers," said Dr Robertson. "This new system of eLearning will give our crews more time to get hands on experience instead of spending valuable crew time learning theory. We are most grateful to the Centrum Guardian Project for their kind donation," added Dr Robertson.

The NSRI have a potential of at least 22 courses that a prospective volunteer will go through in their career with the NSRI. Learners are able to engage with course facilitators and each other for a sense of online community, via instant chat or email.

The NSRI has a need to train the 940 volunteers every year in a range of areas including maritime emergency care, seamanship, leadership, engineering, water rescue and communications. These areas require cognitive (theory), psychomotor (skill) and behavioural (attitude) learning by the volunteer. Volunteer time is precious and NSRI is rolling out a programme of eLearning to satisfy the theoretical elements of each course which can be done at home and in the volunteer's own time thereby making learning more accessible, appropriate and volunteer-friendly.

The 2014 Centrum Guardian Project campaign raised R500 000 for specialised training of the South African Emergency and Rescue Services (ERS).

- **Skills (Certificate, proficient in listening skills)**

Listening skills

An assessor needs to be:

- Active and in the moment
- Focused, perceptive
- Respectful

An assessor needs to:

- Ask open-ended questions
- Request a description
- Take notes

80 percent of communication is non-verbal

- Body language
- Posture
- Eye contact
- Arm position
- Facial expression
- Eyes
- Mouth
- Overall attentiveness

Communication is give-and-take… what non-verbal messages are YOU sending?

Remember

- Assessors represent themselves
- Expertise
- Reputation
- Assessors represent the rescue world
- Assessors represent International Rescue Organisation (WRO)
- Assessors support the WRO organisation
- Assessors support the arrangements to which world organisations is signatory

Don't forget that preparation is the key

- Take notes
- Breathe
- Use your imagination
- Smile
- Maintain your sense of humour
- Thank your hosts, thank your team

We invite every paramedic, fire fighter and rescuer to be part of this new opportunity that saves more lives every day and for this reason, we must be prepared to share our knowledge, experience, skills equipment in order to operate in a safe and effective way in our professions.

We thank you for your participation.

Honouring Barend Leonardus (Ben) van der Linde

Born: 21 August 1943; Died: 21 January 2015

By Willie Nel

Ben van der Linde joined Germiston Fire Department in 19 May 1967 as cadet fireman and progressed through the ranks to rank of divisional officer. During this period studied and completed his SAFSI Junior and Fireman exams successfully as well as the National Diploma (Fire Technology) at the Pretoria Technicon.

Ben left the municipal fire department and joined Sasol III Fire Department as Divisional Officer on 9 December 1988.

He went on early retirement on 30 November 2002 after almost 36 years service.

Ben served with distinction in the municipal fire department and led his firemen with honour. He served as operational, training and maintenance officer in the petrochemical fire department. Ben also served the Order of St John, First Germiston Ambulance Division with distinction and trained hundreds of first aid candidates. He was a Basic Ambulance trainer at the Germiston training facility.

Ben's psychological disposition was extremely level and as a fireman on his shift and friend for close on 37 years, he has always treated his sub-ordinates with dignity and served as buffer between them and management. He was a family man par excellence and loved them dearly.

It was an honour to know him, experience his calmness under stress and learn from him how to become an old fire fighter.

His funeral was conducted at the Nederduitsch Hervormde Kerk, Secunda, on Tuesday 27 January 2015 by the Reverend Hannes Wolmarans.

I salute you my brother!

10TH ANNIVERSARY CELEBRATION

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WORKING ON FIRE

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Alleviating Poverty, Conserving the Environment, Improving Lives

Obituary of the late
Petrus Gysbertus Roos (Piet)

By Johan Pieterse, spokesperson, Tshwane Emergency Services

Petrus Gysbertus (Piet) Roos joined the erstwhile Rosslyn Fire Services in 1976. After one year of service he left only to find after 12 months, the new job opportunity didn't work for him. Piet wanted to serve the community and had a passion to work as a fire fighter.

He applied for a position as leading fire fighter at Rosslyn Fire Services and was re-appointed. After the amalgamation between Pretoria, Centurion and Akasia to form part of the bigger City of Tshwane, Piet became one of the City of Tshwane Emergency Services personnel. He served as a loyal, committed and well-disciplined fire fighter for 37 years. Due to his illness, he was transferred to the operational call centre in 2014, where he worked until his passing on 11 January 2015.

Piet leaves behind his wife Adri and eight children of which four daughters were adopted. They were blessed with seven grandchildren.

Oom Piet, as many referred to him, will sorely be missed by his family, colleagues and friends.

May his soul rest in peace. We salute you, Piet!

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Fire fighter retention

'People don't quit jobs, they quit bosses'

By Wayne Bailey

Have you ever thought about why people quit their jobs? What about the last job you had, why did you quit? More money? Better hours? Maybe you moved further from work and it wasn't economically sound to keep driving the miles and putting fuel in the tank verses the money you were being paid.

Some numbers from a recent Dale Carnegie study said, "There is a disconnect between workers and their employers as it's related to turnover issues. The study revealed that 89 percent of employers believe that workers leave their company for more money. In reality, a mere 12 percent of workers actually leave for more money. That's a pretty big perception/reality miss and it may have to do with the theory that ignorance is bliss."

The same study from Gallup revealed, "75 percent of workers who voluntarily left their jobs did so because of their bosses and not the position itself. So conventional wisdom is in fact true – people don't quit jobs, they quit bosses."

If we've determined people quit their bosses, what are some of the reasons in doing so?

Do you care about your employee?

When you have a desire to help your employees succeed and help them have the proper tools such as knowledge skills and a positive attitude and it's not done to make you look good, you're on to something. Remember what Zig Ziglar said, "The only thing worse than training an employee and losing them is to not train them and keep them." Since complements go a long way, make it a habit.

Wal-Mart founder, Sam Walton, knew how important it was to listen. He said; "Asking for and hearing people's opinion has a greater effect on them than telling them they did good job." We have to be effective leaders and allow others to tell them what they need to hear, not necessarily what they want to hear.

Belief

It's wonderful when the people believe in their leaders but it's more wonderful when the leaders believe in their people. Coach Jimmy Valvano said, "My father gave me the greatest gift anyone could give another person, he believed in me." When you have belief in others, it's like you give them permission to succeed.

Honesty

Leo Buscaglia said, "Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment or the smallest act of caring, all of which have the potential to turn a life around." Being honest with your boss, peers and or someone that answers to you is very important. Some individuals require some filters and others, well, you just have to be blunt. We will never grow in our honesty unless we're honest with others. If you we're being told something just to be flattered, you know that person can't be honest with you on other things. I respect the person that's brutally honest with me over the one that is telling me what I want to hear.

Helping hand

I often say people need a hand up and not a hand down. Audrey Hepburn said; "Remember, if you ever need a helping hand, it's at the end of your arm, as you get older, remember you have another hand: The first is to help yourself, the second is to help others." It's our obligation to help our self before we help others. If you're at a point that you always need help, it's difficult to help others. It's difficult to give someone else attention when you're starving for attention yourself.

Doing the right thing

Sometimes you have to ask yourself, what is the right thing to so? Zig Ziglar said; "With integrity, you have nothing to fear, since you have nothing to hide. With integrity, you will do the right thing, so you will have no guilt." Doing the right thing takes maturity and if that's not there, find yourself a mentor, someone that is doing and going where you want to be. You never want to take financial advice from a broke person. Why would you take advice on integrity from someone that is constantly making bad decisions? Ask advice from someone that is successful and has fruit in the life.

Vision

George Washington Carver said, "Where there is no vision, there is no hope." Just think about waking up tomorrow without hope. There was a story about a man and others in prison that was being accused of crimes they didn't commit. As his prison mates were led off to be beaten for the 100th time, the cell mate would say; Find out what you can and report back to me and the others." He knew if the man went into the room without hope, he may admit to being guilty to a crime he didn't commit. By asking him to report back what he saw, gave him hope. Without hope, man will perish.

Potential

Bruce Lee quoted; "Ever since I was a child, I have had this instinctive urge for expansion and growth. To me, the function and duty of a quality human being is the sincere and honest development of one's potential." Lee had the discipline to grow as a human being. What can we do to grow and expand our potential? Read books that will help you unleash your inner strengths, be accountable to someone you respect and to one that is doing what you desire in life. It's our duty to recognise the gifts and talents in others and if the desire is there in that person, help them be the best they can be.

Trust

Once trust is broken, it's difficult to gain back. Trust can be lost in many

Teaching with technology

By Schalk-Willem van der Merwe, Cape Peninsula University of Technology, Department of Emergency Medical Sciences (DEMS)

Bridle rigging

Gone are the days of white boards and chalk but instead the class room of the future is wired, wifi-ed and digital; this ushered in smartboards, networks, technology and QR codes. At this stage, I need to declare my profound love for rope rescue that will become evident through the interlinking thread within the article. However, see these talking points as universal principles, which may be applied to any teaching and learning platform.

I usually start a lecture with a saying: "Everything you need to know to pass this module you will not learn in this class."

One might see this comment as arrogant or dismissive but it is laced with truth! 'Real world' lessons are seldom imparted in an instructive lecture but rather at the coalface, which is not always found in the bounds of a book. Learning starts when the class is out.

Smart devices

Smart devices often outsmart the user. As the speed of technology enhancement increase at an exponential rate, the learners in your class often have all the subject material at their fingertips. Making one wonder, ▶

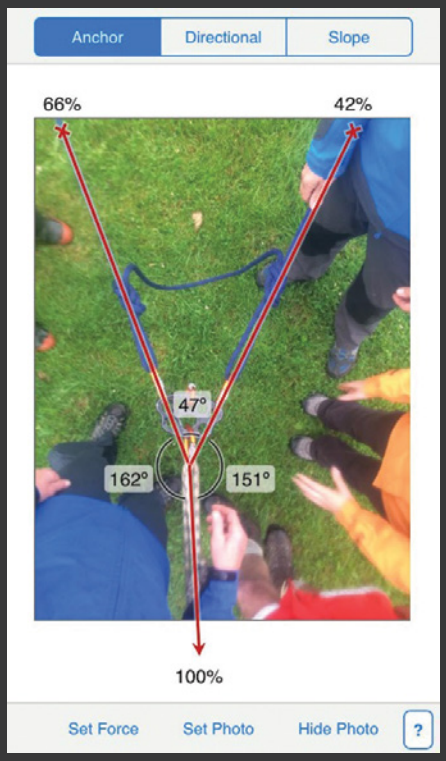
ways such as stealing, speaking words that are untrue. Stephen Covey said, "Trust is the glue of life. It's the most essential ingredient in effective communication. It's the foundational principle that holds all relationships." If you lose trust in your spouse or a coworker, the glue becomes weakened and lives and careers are destroyed. It's often said, "Crow is easier to be eaten when it's still warm. Make sure if you have broken the trust of someone, you apologise in hope to salvage your relationship. Albert Einstein quoted, "Whoever is careless with the truth in small matters cannot be trusted with important matters." When you lose trust, especially your boss', it takes a long time to earn that trust back.

Accountable

It's easier to point the finger at others when things go bad. I say when you're pointing a finger, you actually have three fingers point back at you. Try it. As a leader, you have to be transparent and be willing to explain your actions. When the team performs badly, it's your responsible to take the hit. Henry Cloud said, "If you are building a culture where honest expectations are communicated and peer accountability is the norm, then the group will address poor performance and attitudes." Sometimes the group can police their peers much better then the boss coming in with a heavy hand.

Thoughts to consider

If our decisions and actions are healthy, we have accountability and our desire is to see others exceed, your organisation will grow and you're employees won't quit you as the boss. Your people are already evaluating you, so, it would be in your and you're department's best interest to reflect and ask, are you earning the trust of others? Adding more value to others? Showing them you care? If not, start today with something heading towards that goal.



RigRite that allows you to calculate the forces in a rope system

Action cameras can give the facilitator the ability to cater for larger audiences during training sessions

- what is the role of the facilitator in the modern world? Therein lays the rub.

Tapping into this knowledge source is invaluable in the form of applications (Apps) replacing the tactical cheat sheet or field operations guide (FOG) of old, which often disintegrated over time at the most critical of times. Murphy's Law dictates that you would find the exact page missing when it's most needed. Not only does it reinforce the value of having quick reference material but also encourage lifelong learning where a picture may paint a 1 000 words.

Apps are legion when it comes to smart devices but as we operate in a niche, our options are often limited but seldom free. I've seen applications dealing with new car technology specifying information such as: location of the battery, baron steel location, amount of airbags etc. I often use an App called RigRite that allows you to calculate the forces in a rope system with multipoint anchors, redirects, tripods, highlines and slopes. RigRite enables one to take or select a photo (in your gallery) of your rigging and overlay a diagram to measure the angles and calculate the forces.

The Holmatro Rescue game

Not all Apps are purely educational but can be of equivalent instructive value (learning through play simulation) such as the Holmatro Rescue game, which takes one through a light motor vehicle rescue scenario; guiding the player through the procedure on a patient extrication whilst you are being timed and ranked according to your performance from rookie to professional.

Class room essential (tech toys)

The more complex your knowledge/ understanding of your surroundings, the more enhanced your practice will be (horizontal vs vertical discourse); "Everything happens for a reason and that reason is usually physic," Anon.

Enforce

The Rock Exotica Enforce is a load cell that measures forces within your lines during rope operations and an excellent way of practical application of physics in the 'real world'. It is particularly

helpful for the teaching of mechanical advantage. The Enforcer is a compact aluminium load cell that measures force up to 20kN. Utilising two sampling modes, the Enforcer is able to monitor systems and log drop testing in high resolution. Unique features like Bluetooth connectivity and swivel attachment points separate the Enforcer. During an operation one may use either the screen on the device or the Bluetooth connectivity to a smartphone with the ability to record and store the data. The Enforcer is economical in terms of pricing and mobility 203mm by 53mm at 397g. Previously, load cells needed a laptop or PC to monitor or extricate data, which limited its operational ability.

Rock Exotica Enforce is a load cell that measures forces within your lines

Unmanned aerial vehicles (UAVs or drones)

Although the jury is still out on the legality of commercial use of UAVs, the educational and operational value is immense. It minimises the risk to the rescuers during urban search and rescue (USAR) missions and/or surveying an area of search, route planning. I foresee in the near future that drones will form as integral a part in rescue operations as personal protective equipment (PPE) is currently. Some of the operational capacities in which UAVs can be applied in, could range from deploying initial lines during a highline rescue to sending communications or monitoring a rescue from a gold command level, all the way down bronze command. Battery life is a major drawback for these devices unless one ventures into the realms of military-grade fixed wings, where the larger drones have mini command centres and advanced optics. However, an increase in scale results in an increase in complexity of operation. Many 'recreational' UAVs, especially quad copters, comes with both manual and auto pilot fly mode, which is simple to master without prior experience. CPUT DEMS makes use of a quad copter that we recently introduced within the USAR and WSAR and rope rescue training, the process of becoming proficient with the care, maintenance and flying was extremely fast; probably within a few hours.

GoPro/action cameras

Used in the correct manner, action cameras could be an invaluable tool for teaching and learning, albeit it on the UAV or a fixed position, as it has the ability to live steam or record. Action cameras can give the facilitator the ability to cater for larger audiences during training sessions, providing a greater field of view of the rescue training operation. These cameras have an additional educational value, especially during team-type training. Where rescue roles allocated are static, the learners could miss the opportunity of engaging in other roles in the operation ie being the medic, rigger or safety officer etc within the team. It is, however, important to make use of a cold debrief by means of a reflective report after reviewing the video evidence. This will empower the whole team as much as the team leader, who had a bird's eye view of operation in its entirety.

Multi media

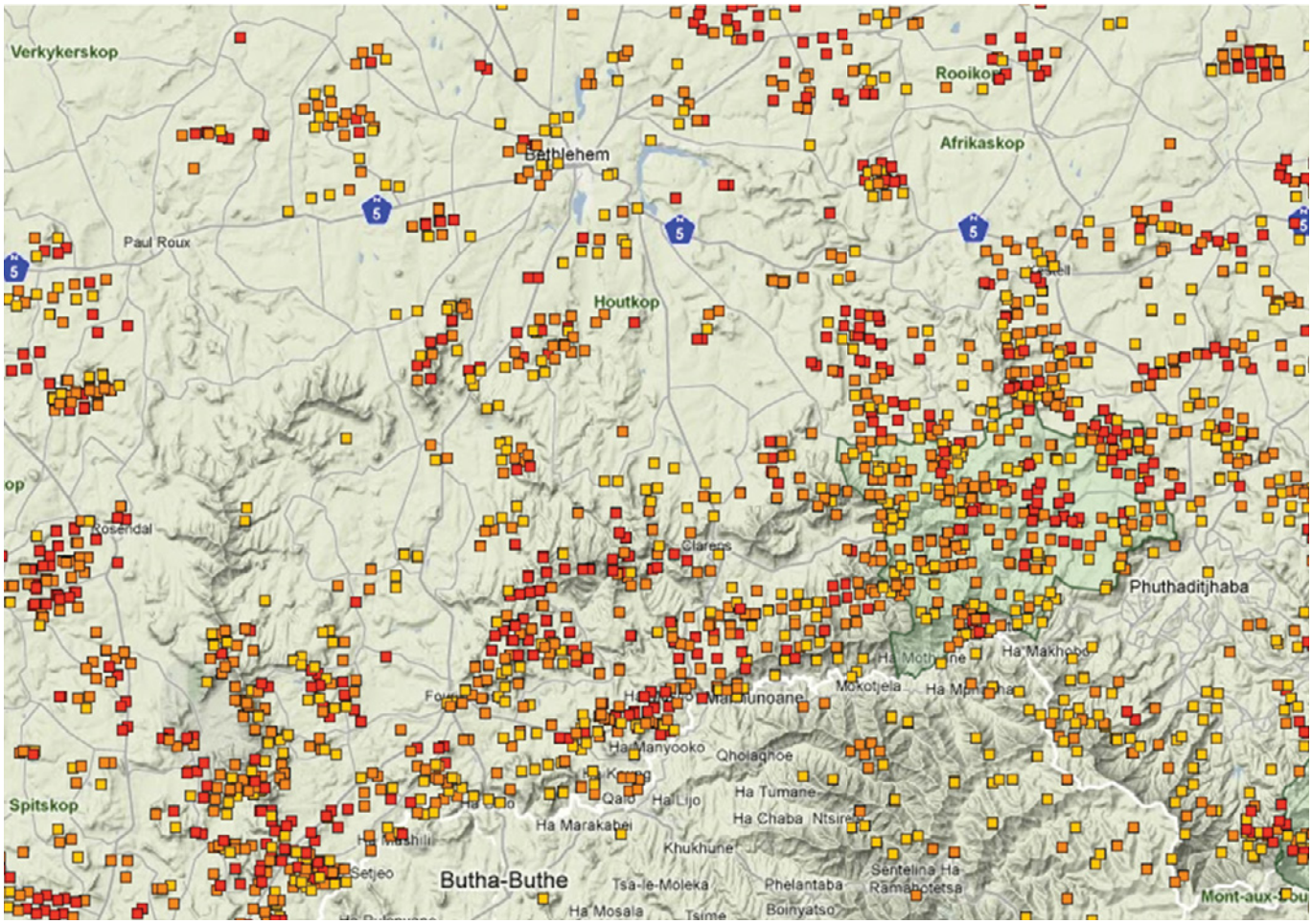
I doubt that online media such as YouTube are underutilised. However, it could be a double edged sword. If the content is not your own, it may require vetting prior to distribution. Also, the content owner may remove the content at any time. My best advice to you would be to create your own content for these platforms. You have the ability to keep it hidden from searches and include hyperlinks in electronic notes for students to access on their behest. Problems could arise should one have a too heavy reliance on external content such as this. Despite the educational value it may impose a negative connotation to you; the double edged sword effect. However, one cannot detract from excellent authors of some of these YouTube channels such as Richard Delaney and Rescue Response Gear, (the list is by no means exhaustive), which is often professionally filmed, edited and presented in a scientific manor.

The writer is not affiliated to any company whose products are discussed and receives no compensation for his positive view of an institution and/or product.

AeroVironment's Qube drone can hover and transmit live video and metadata to a tablet controller as part of search and rescue operations

Bethlehem FPA

going strong for 18 years



Fire incidence within Bethlehem FPA 2007-2011

The Bethlehem Fire Protection Association (FPA), previously joint with the commando and military unit, was founded in April 1998. In 2000, Charl Genis became chairperson of the Bethlehem Fire Protection Association but was separated from the commandos having his own control room. Situated at the centre of Bethlehem town, the control room currently staffs five full-time employees and a management team of four. Moreover, the Bethlehem FPA has a base on the western side of town, which is home to two Working on Fire (WoF) teams.

Fires in the Fouriesburg area 2013

Chris Helm is chairperson of Bethlehem district agriculture with Hugo van Doornich as second in command. Chairperson of the Bethlehem FPA since 2000, Charl Genis and chairperson of safety, Herkie Viljoen fall under Van Doornich, while David Schwartzberg, guides and provides the required feedback and information to the farmers unions by liaising with each representative.

Risk profile

Of all of the local municipalities within the Free State, Dihlabeng (Bethlehem FPA) is the area that regularly burns the most. An area of concern is the high incidence of fire within the FPA, a fire incidence map from Advanced Fire Information System (AFIS) shows a dramatic decrease in fire incidence as one exits the local municipality.

The southern border of Bethlehem FPA is the international border with Lesotho, which poses an extreme risk as many of the farms adjacent to the Caledon River are Government-owned properties and are vacant. The risk increases when

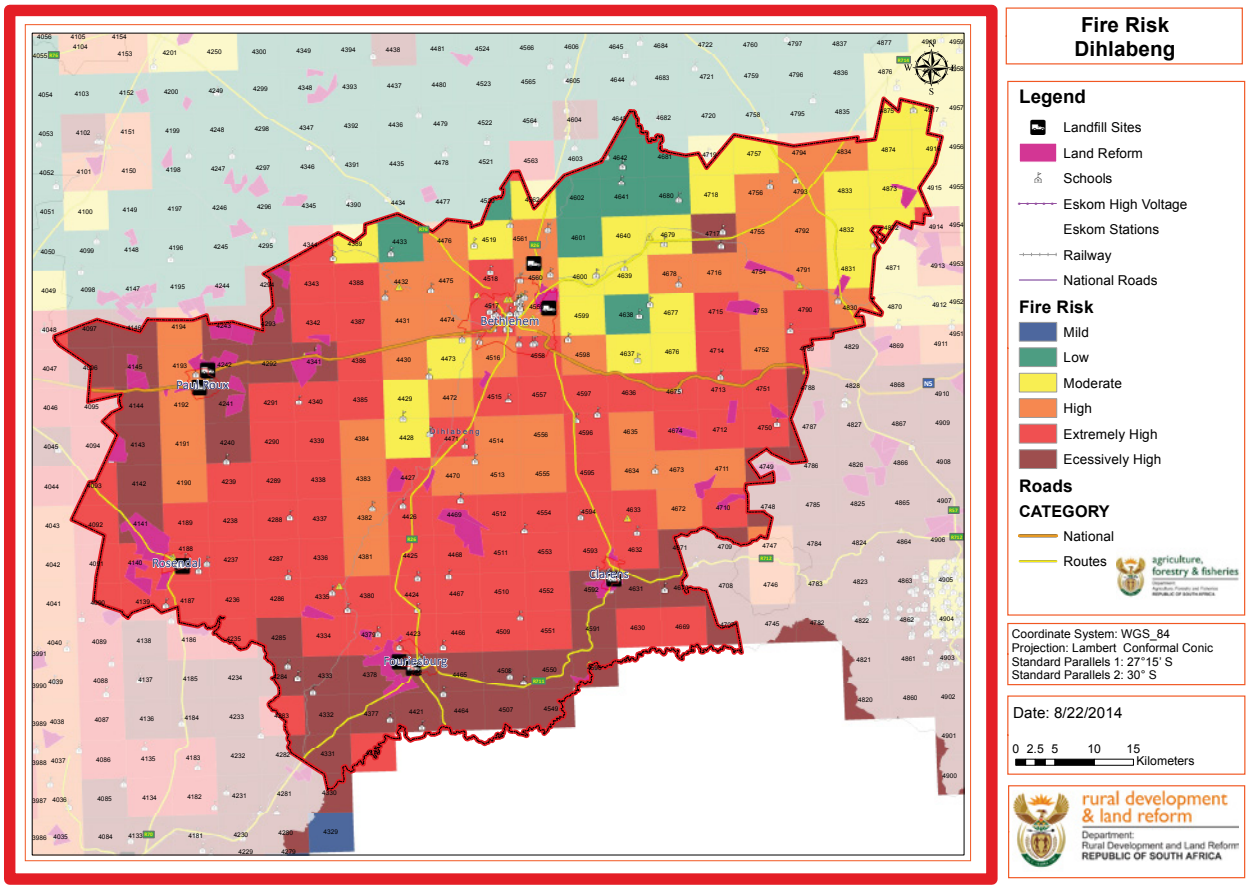
To combat the threat on the southern border, the Clarens cell of Bethlehem FPA has constructed a number of tracks in the mountains above Clarens; this has reduced response times and led to a decrease in size of fires in that area

people cross the border at night and set fires on this land for grazing purposes. Occupied land is several kilometres from the border and before one realises it, a large fire burns. In the last 10 years aerial resources have had to be deployed to extinguish these fires. This poses a problem as to who then becomes responsible for payments.

There are 47 rural development farms (emerging farmers) located within the Bethlehem FPA. However, only one of these lies in a 'moderate risk area'. The remainder lie in high to extremely high risk areas.

Genis says that risk during Bethlehem's fire season is attributed to large amounts of fuel loads. Bethlehem's fire season is also driven by high winds, adding to the excessive amount of fires in the region, making fires more difficult to contain. As fires are quite common in the Bethlehem region, all land owners are well resourced with their own fire fighting equipment. Farmers are divided into groups of approximately 10 cells, or 'fire management units' making up a 'farmers union', with an appointed leader who reports directly to the fire protection officer (FPO) on behalf of the group.

The Clarens Fire Association (CFA) received a financial boost when the organiser of the second Clarens Fire Association Golf Day, Christelle Basson (OFM), handed over a cheque for R80 000 to Dirk Viljoen and Rodney Wainwright of the Clarens cell of Bethlehem FPA recently. The money was raised at the golf day, which was made possible by OFM, suppliers and The Clarens Golf and Trout estate. The funds raised were used to purchase an old International truck that is used for transporting the Clarens WoF team.



Fire risk map of Dihlabeng

Building resilience against wildfires in rural areas

By Malcolm Procter, deputy director, Department of Forestry and Fisheries (DAFF), Free State, South Africa

The majority of wildfires in South Africa are caused by human activities usually associated with land use practices and changes

As in other regions of the world, the majority of wildfires in South Africa are caused by human activities usually associated with land use practices and changes. Many land use systems in these regions are vulnerable to wildfires. The property, health and welfare of people in these areas are negatively affected by direct and indirect consequences of fire and air pollution. Active involvement of the local people has therefore been recognised as a condition for the successful implementation of fire management programs, especially at the interfaces between veld and residential areas.

Technological advancements in fire fighting should have had a decisive positive effect by now, if the problem was only a matter of fire suppression, especially given the serious general increase in fire fighting budgets in this time period. However, the reality is quite different. It can easily be shown that the problem is much more complex than just improving fire fighting effectiveness alone. It has to do with factors affecting the occurrence of fires, its characteristics and destruction potential. It also has to do with environmental factors, social evolution, economic development and even politics as well as institutional arrangements.

All the technology in the world will not prevent or abate wildfire disasters without incorporating the human elements of awareness and participation. In fact, it could be said that all disaster-related activities are people-centred. The objective of people-centred early warning systems is to empower individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property, the environment and loss of livelihoods. A complete and effective early warning system comprises four inter-related elements: risk knowledge, monitoring and warning service, dissemination and communication and response capability. A weakness or failure in any one part could result in failure of the whole system.

Mitigation

The FPA is very active in the construction of strategic fire breaks; these are made annually the picture below shows firebreaks constructed around Clarens.

One of the challenges faced by Bethlehem FPA is related to the Telkom fibre optic cables that run through the area. These cables are generally located where fire breaks are essential and this makes construction difficult.

In 2012 in an effort to improve the chances of minimising the damage and risk to life and property, the Clarens cell made 50km of strategic firebreaks in the area. This is extremely time consuming and costly as it is done manually and involves the use of many people and much equipment. Tests were done on the evening of Monday, 13 May, where a helicopter was used to drop small capsules that would ignite the vegetation close to the crest of the mountains from the western side of Golden Gate, all the way through to Fouriesburg. This ignition was done in the late afternoon to allow sufficient time for the veld to burn a wide enough firebreak and then for nature to self-extinguish the fire during the night. The self-extinguishing of the fire is dependent on temperature, low wind, high enough relative humidity and correct condition of the veld.

Equipment

Bethlehem FPA has a control room that is manned 24/7/365 days a year, the 'ops' room is located adjacent to the call centre.

The four most active cells are located in the highest risk areas. Fire fighting equipment managed by the FPA includes a fixed-wing spotter plane and a chopper based at the Bethlehem FPA. The region additionally makes use of three WoF teams.

Fire occurrences

152 fires were reported in the region in 2014, with Clarens, Fouriesburg, Slaberts and Golden Gate being most prone to wildfires. Genis says that the primary cause of fires in the region is attributed to arson. In just two seasons, over 100 000 hectares were burnt resulting in a few casualties and excessive animal loss. The FPA covers the total area of 510 000 hectares. During the 2014 fire season 111 000ha burnt in the Dihlabeng/Bethlehem Local Municipality.

Many of us preach 'integrated fire management' but like the engine of a motorcar, unless the engine is well tuned and firing on all cylinders, it's not running well and thus prone to breakdowns. However, are we really there yet or are only some cylinders firing?

The underlying concept of integrated forest fire management is to better integrate fire and people into land-use and vegetation management systems. The approach is based on the following considerations:

- Fire is a spatially and temporally disperse phenomenon. It is difficult to have a centralised control system
- Responsibility for fire management must be brought closer to those who benefit both from the use of fire and from having more control.
- Ecologically compatible, sustainable and safe use of fire is important.
- With few exceptions, complete disuse of fire is undesirable.
- Defining responsibility, the need for complementary policy and legislative changes, identifying and supplying technical and other support needed to enable communities assume a central role in fire management are some of the difficulties encountered.

"Alliances between all role-players, whether they are from municipalities or fire protection associations (FPAs), are a fact of life in business today. Some alliances are no more than fleeting encounters, lasting only as long as it takes one partner to establish control. Others are a prelude to a full merger of two or more FPA's technologies and capabilities. Whatever the duration and objectives of a fire, being a good partner is an essential asset, call it an FPA's collaborative advantage. In a global economy, a well-developed ability to create and sustain fruitful collaborations gives FPAs a significant competitive leg up."

Wildfire management requires fire brigades and fire protection associations to collaborate across boundaries and jurisdictions. Collaboration helps achieve goals together that they could not achieve independently. But more can be done. Citizens, managers and policymakers continue to express the need for expanded and improved collaboration for wildfire and fuels management.

Collaboration is the pooling of information, money, labour and other resources by two or more stakeholders to solve a set of problems that neither can solve individually. It can lead to decisions that are more likely to be implemented, while better preparing FPAs and communities for future challenges. Collaboration involves private landowners in defining objectives and prioritising projects. Such involvement helps motivate them to take responsibility for necessary mitigation actions on their land.

Collaboration can create relationships and agreements that increase the efficiency of fuels management by sharing personnel, equipment and data; leveraging resources to attract funding and mobilising citizen volunteers. Although it may initially take more time and money, collaboration bears long-term benefits of increased efficiency and greater value for money. Wisely planned hazard and vulnerability reduction

The underlying concept of integrated forest fire management is to better integrate fire and people into land-use and vegetation management system

efforts and financing measures taken before a catastrophe pay excellent dividends in reducing economic impacts. Mitigation expenditures are just a tiny fraction of the funds spent on reconstruction in the aftermath of catastrophes.

- Preloss financing helps get mitigation measures on to the policy agenda. It forces policy makers to consider the cost of disaster relief against other alternatives and how those costs might be effectively reduced when reduction is still an option.
- Predisaster budgeting for disasters emphasises the practice of recognising the cost of public policy for disaster relief and recovery before the event.

New attitudes, shared knowledge, support and working relationships can lead to new policies and government initiatives

- Post disaster budgeting for losses after the event may be regarded as financial reporting rather than budgeting or more charitably as revision to the budget plan in light of new information received.
- The appropriate rules of pre- and post-funding for disasters are key elements in designing effective disaster mitigation policies.
- It is also possible that if local government's policy response is developed in advance of the urgency of loss, the policy will be more cost-effective, efficient and consistent with long-term objectives.
- Policies that promise financial assistance for relief and recovery to victims of disaster without increasing national saving and mitigation are likely to increase the welfare losses from disasters.

As finances to prepare for and reduce the impacts from catastrophic wildfires falls short, there is a critical need to provide communities with up-to-date guidance in addressing wildfire risks through strategic and collaborative fire planning, reducing structural ignitability, conducting fuels reduction projects, and monitoring progress. Adopting a risk-averse perspective and including the volatility of disaster risk in decision making has important implications for the evaluation of primary and risk management projects. In the assessment of primary projects, risk is more appropriately captured and a more careful project selection can be conducted when the extreme-event character of natural disasters is properly accounted for. For secondary risk management measures there is increased benefit in conducting those evaluations, as benefits in terms of avoided impacts are higher.

Today, cooperation and planning and the resulting formal agreements are more important than ever but working toward agreement requires careful planning. It's important to realise that cooperation takes place between people, not organisations. Relationships that are built during collaborative projects help to create trust. Trust can be further fostered if collaboration is inclusive and shows by example that the partners value diversity, local residents may trust individual employees of a government department but distrust the department. When departmental or local municipal employees participate in collaborative activities as individuals, trust builds between them and residents and may eventually expand to include the department.

One of the major challenges of fuel management is motivating private landowners to take responsibility for necessary prescribed burning on their land. Studies show that collaborative projects have promoted personal responsibility and motivated landowners to mitigate their vulnerability to fire. This includes monitoring weather conditions, notifying neighbours of ones intention to burn.

Some of the reasons why prescribed burning is not practiced are:

Agricultural production is a risky business as it is very sensitive to extreme weather and climate conditions. Due to the frequency of extreme weather and climate events in the country, the agricultural sector has moved from one disaster to another. Farming communities can either be at the mercy of these natural factors or try to benefit from them. The only way to profit from natural factors is to take them into account and learn about them as much as possible.

Although prescribed burning may be planned and implemented at the local level, to be effective it must be part of a holistic approach and contribute to and support a broader landscape-level plan for fuel management. Several case studies of collaborative groups working in watershed restoration show the positive results of joint resource management planning across a broad geographic area.

Many of the benefits of collaboration are intangible, or 'invisible successes'. New attitudes, shared knowledge, support and working relationships can lead to new policies and government initiatives. Collaborations also foster improved job satisfaction and motivation among FPA members who report greater public support for action.

Collaborative projects build the abilities of residents, community organisations and leaders to meet local needs and expectations. They bring people together not only as stewards of public and private land but also as empowered citizens, enabling them to sustain wildfire and fuels management programs into the future on their own.

From a risk prevention and management point of view, it is to our advantage to have as many land-owners as possible actively involved in and managing their respective FPAs and the plans they make as a collective to manage fires, coordination and integration of all parties is the key to an effective planning. This mitigates the risk and gives them co-ownership of the risk management process. In order to encourage membership of FPAs, the umbrella will strive to keep the costs of membership of FPAs as low as possible. This will have a negative impact on the finances of FPAs. However, the umbrella will strive to source funding from land taxes. Having said all of this, the umbrella FPA is of the opinion that we can manage our own risk better and mitigate the general risk of fire spread by encouraging landowners to participate fully in the FPAs.

Saint Florian:

The patron saint of fire fighters

All fire fighters are aware that Saint Florian is the patron Saint of fire fighters. Many have purchased and are very proud to wear the Saint Florian medallion around their neck. These medallions are usually gold and many are shaped in the form of a Maltese cross with the image of Florian stamped in the centre of it.

If you ask who Florian was or why he is our Patron Saint, most fire fighters don't know. They assume it is because he made some heroic fire rescue or maybe he was a priest who was involved in the fire service. These answers are the typical response but neither is accurate.

St Florian, commemorated in the Roman Martyrology on 4 May, was an officer of the Roman army, who occupied a high administrative post in Noricum (now part of Austria) and who suffered death for the Faith in the days of Diocletian. He was a brave soldier and a tenacious fighter. Rome recognised the danger of fire and was the first to employ a fire department. This first fire department was made up of slaves. They had no real desire to risk their lives battling the flames of their captors.

Rome desperately needed fire protection. They called on Captain Florian to organise and train an elite group of soldiers whose sole duty was to fight fires. Captain Florian indeed organised such a group. They were highly trained and very successful at protecting Rome from fires.

A brigade of fire fighters followed the army and provided fire protection at their encampments. These fire fighters were highly respected and easily recognised. They wore the traditional Roman soldier uniform except the skirt was green.

The most famous picture of Saint Florian depicts him with a young boy pouring water from a pitcher onto a fire. This picture if seen in colour reveals this green skirt. Rome was very impressed by this young Captain and all that he had accomplished. They decided to reward him by making him a general.

Generals were often given large tracks of conquered land to govern. The only rules were that they had to enforce the laws of Rome and collect the taxes. Florian's area included almost all of Poland. Rome began to hear some rumours about the way Florian was governing his land.

It was reported that he was not enforcing Rome's law forbidding Christianity. Rome did not believe this, but they did sent investigators to check.

Rome sent a group of soldiers to confront Florian. They warned and threatened him that he must enforce the laws of Rome and abolish Christianity. Florian not only refused, he confessed that he had embraced the faith and become a Christian himself. Florian gave himself up at Lorch to the soldiers of Aquilinus and the governor, confirming that it was true. Rome was furious. They tortured him and demanded he renounce his faith. Florian steadfastly refused and Rome ordered his execution. Florian was to be burned at the stake.

Soldiers marched him out and secured him to the post while villagers gathered around to witness the execution. Florian begged his executioners to build the fire higher. He implored them to light the fire so his soul would rise up to heaven on the smoke from the blaze.

The soldiers had never seen this kind of reaction from a person about to be burned alive, so they were frightened. What if his soul did rise up, right in from of all the villagers? They could not afford a martyr. The fire was not lit.

Florian was taken away by the soldiers who decided to drown him in the River Enns. He was placed in a boat and rowed out into the river.

Saint Florian

A millstone was tied around his neck and he was pushed over board and drowned. After his death, people who were trapped by fire reported that they invoked Florian's name and his spirit delivered them from the flames. These occurrences were reported and documented many times.

His body, recovered and buried by a pious woman, was eventually moved to the Augustinian Abbey of St Florian, near Linz. It is said to have been, at a later date, transferred to Rome. Pope Lucius III, in 1138, gave some of the Saint's relics to King Casimir of Poland and to the Bishop of Cracow. Since that time, St Florian has been regarded as a patron of Poland as well as of Linz, Upper Austria and of fire fighters.

Florian was confirmed a saint for his commitment to his faith and the documentation of his spirit delivering trapped persons from the flames. It is only fitting, that fire fighters, committed to their duty, and instilled with the spirit to dedicate themselves to the protection of life and property, should choose such a man as their patron saint.

History credit: Lombard Fire Fighters Union Local 3009

2015

February

16 - 17 February 2015
ATA Basic life Support Instructor Course (BLS I)
All Instructors must have a valid BLS Instructor Certificate, and have a firm, working knowledge of the training materials, including textbooks and certificates to be issued for each specific course.
Venue: ATA Fourways, South Africa
Contact: Gugulethu More
Tel: 011 450 4981
Email: gugulethu.more@ata-international.com

18 to 20 February 2015
Gauteng PIER Working Group Workshop
PIER is a pro-active action which will promote EMS to all spheres of our communities. A strong Public Information Education and Relations programme can help the emergency services operations cope with the challenges of modern emergencies
Venue: Kopanong Conference Centre, Benoni, South Africa

23 – 27 February 2015
Light Motor Vehicle Rescue Week
Vehicle extrication course run by Pro-Ethnos Services
Venue: Standerton, Mpumalanga, South Africa
Contact: Jurie van Staden
Tel: 017 712 6015

23 – 27 February 2015
FPASA Fundamentals of fire investigation
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 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

23 – 27 February 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Rope Rescue 1 course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel
Email: isabel.dejongh@sasol.com

24 – 25 February 2015
ATA 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: ATA Fourways, South Africa
Contact: Gugulethu More
Tel: 011 450 4981
Email: gugulethu.more@ata-international.com

26 February 2015
SAEC Basic fire/fire marshall
Training courses run by SA Emergency Care
Venue: Modderfontein, Johannesburg, South Africa
Contact: Nicole Vermaak
Tel: 011 608 0907

March

2 – 6 March 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Rope Rescue 2 course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

5 – 6 March 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Resuscitation training for vessel entries course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

6 March 2015
Disaster Medical Workshop for Paramedics
Hosted jointly by Rescue-SA and Japan International Cooperation Agency
Venue: University of Johannesburg, South Africa
Contact: Email: info@rescue-sa.co.za

9 March 2015
Disaster Medical Workshop for Medical Doctors
Hosted jointly by Rescue-SA and Japan International Cooperation Agency
Venue: University of Johannesburg, South Africa
Contact: Email: info@rescue-sa.co.za

9 – 13 March 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Confined Space Rescue 1 course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

9 – 20 March 2015
FPASA Advanced fire prevention course
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: 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 March 2015
AIPS 2015
AIPS 2015 is the meeting place for professionals involved in protection, security, fire fighting and related fields
Venue: Almaty, Kazakhstan
For more information visit:
www.aips.kz/index.php/en/

12 March 2015
SAEC Basic Fire/Fire Marshall
Training courses run by SA Emergency Care
Venue: Modderfontein, Johannesburg, South Africa
Contact: Nicole Vermaak
Tel: 011 608 0907

16 – 20 March 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Confined Space Rescue 2 course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

17 – 19 March 2015
The 5th International exhibition 'UzSecureExpo', Industrial safety and fire protection
The exhibition will showcase equipment and new approaches to security, such as technical means to ensure safety in industrial, alarm systems for fire and smoke, the equipment to provide integrated security, fire trucks, walkie-talkie
Venue: National Exhibition Complex UzExpoCentre, Uzbekistan
For more information visit:
ieg.uz/archives/983?lang=en

23 – 27 March 2015
Light Motor Vehicle Rescue Week
Vehicle extrication course run by Pro-Ethnos Services
Venue: Pietermaritzburg, KwaZulu-Natal, South Africa
Contact: Jurie van Staden
Tel: 061 384 2617

23 – 27 March 2015
FPASA Fire appliance reconditioning
A course provide learners with a working knowledge of the correct measures to be taken to restore an extinguisher or hose-reel to full operational readiness
Venue: FPASA College, 105 Springbok Road, Bartlett, Boksburg, Gauteng, South Africa
Contact: Christine van der Westhuizen
Tel: 011 397 1618
Email: college@fpasa.co.za
For more information visit: www.fpasa.co.za

24 - 26 March 2015
Wildland-Urban Interface conference
The program will include fire adapted communities, operations and suppression, wildland fire policy and tools
Venue: Reno, Nevada, USA
For more information visit: www.iafc.org

25 - 26 March 2015
Fire Australia 2015 conference
A fire protection industry conference, the program will incorporate two and a half days of presentations, workshops and social activities
Venue: Gold Coast Convention and Exhibition Centre, Broadbeach, Australia
For more information visit:
www.fireaustralia.com.au

26 – 27 March 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Resuscitation training for vessel entries course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

28 - 29 March 2015
Technical Rescue Conference
The conference is open to all responders and includes lectures and practical skill sessions in a variety of subjects including rope, confined space, structural collapse, water, vehicle, machinery and trench rescue as well as incident and team management training.
Venue: New York State, USA.
For more information visit:
www.dhses.ny.gov/ofpc/news/events/

30 March 2015
Sasol Secunda Chemicals Operations Emergency Management Training

Basic Petrochemical Fire Fighting course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

31 March – 1 April 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Intermediate Petrochemical Fire Fighting course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

April

7 – 24 April 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Fire Instructor 1 course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

9 April 2015
SAEC Basic fire/fire marshall
Training courses run by SA Emergency Care
Venue: Modderfontein, Johannesburg, South Africa
Contact: Nicole Vermaak
Tel: 011 608 0907

10 - 11 April 2015
Ethekwini Fire's 'Grinder' Challenge
Fire fighter competition with categories such as age, gender and relay team. For all professional, volunteer and seasonal fire-fighters involved in municipal, aviation, military, petrochemical, ports authority and freight rail fire services
Venue: North Beach Amphitheatre, Durban, South Africa
Contact: Nicholas Orson
Tel 0718596793/ 0313087019
Email nicholas.orson@durban.gov.za

13 - 16 April 2015
MIPS Moscow
International exhibition for the safety, security and fire safety industry
Venue: VVC, Pavilion 75, Moscow, Russia
For more information visit: www.mips.ru/en-GB

13 – 17 April 2015
FPASA Fire prevention and safety strategies
This course covers the theory of fire, legislation, use of extinguishers, flammable liquids and gases, hot work, fire hazards of electrical equipment 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

20 – 24 April 2015
FPASA Fundamentals of fire investigation
Promotes a clear understanding of fire investigation and the rendering of opinion regarding origin and cause, includes practical investigation exercises and is 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

20 - 25 April 2015
FDIC International Conference
Venue: Indiana Convention Centre, Indianapolis, USA
For more information visit: www.fdic.com

21 - 24 April 2015
5th EMSSA international conference in combination with the 19th World Congress on Disaster and Emergency Medicine
The theme for the 2015 conference is creating capacity, building resilience; with a focus on utilising prevention and preparedness to minimise the impact of disasters and hasten recovery by developing more disaster resilient communities.
Venue: Cape Town International Convention Centre, Western Cape, South Africa
For more information visit:
www.emssa2015.co.za/

22 - 24 April 2015
EENA CONFERENCE
The conference brings together European emergency services, public authorities, researchers and industry representatives from all over Europe and beyond. High-level issues will be discussed during the plenary sessions while operations and technical issues will be addressed during the parallel tracks.
Venue: RIN Grand Hotel, Bucharest, Romania
For more information email: tc@eena.org

22 – 25 April 2015
International Fire Service Accreditation Congress (IFSAC) 2014 Annual Conference
Venue: Birmingham, Alabama, USA
For more information visit: www.ifsac.org

25 April 2015
The African Federation for Emergency Medicine Third Consensus Conference
The AFEM represents a broad coalition of national societies, organisations and individuals from over 25 countries
Venue: IPM building, grounds of Tygerberg Hospital, Cape Town, South Africa
For more information visit:
www.emssa2015.co.za

28 – 30 April 2015
Fire and Safety 2015 - The 14th International Exhibition for Fire and Disaster Prevention Applications
International Fire and Safety Expo will be held concurrently with Secutech, 18th International Security Expo. A gateway to buyers searching made-in-Taiwan products, exploring the latest technologies, connecting and building relationships with suppliers
Venue: Taipei, Taiwan
For more information visit:
www.chinaexhibition.com/Official_Site/

29 – 30 April 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Resuscitation training for vessel entries course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

May

4 – 15 May 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Vehicle and machinery rescue 1 course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

11 – 12 May 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Resuscitation training for vessel entries course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel
Email: isabel.dejongh@sasol.com

12 - 14 May 2015
Securex and A-OSH Expo
Securex will be the largest and most comprehensive show of its kind in Africa and the only show exclusively dedicated to the very latest developments in security, safety, fire and protection.
Venue: Gallagher Convention Centre, Johannesburg, South Africa
Contact: Joshua Low
Email: joshual@specialised.com

12 - 15 May 2015
NAMPO
NAMPO Agricultural Trade Show visitors offer latest equipment and technologies for the agricultural castor including demonstrations and competitions.
Venue: NAMPO Park, Bothaville, Free State, South Africa
For more information visit: www.nampo.co.za/

13 - 15 May 2015
The Alan Brunacini Fire-Rescue Leadership Institute
This retreat for chief officers introduces attendees to an array of case studies and personal experiences by some of the USA's fire service leaders. Roundtable discussions and presentations designed to prepare individuals for their journey through fire and rescue leadership.
Venue: Charleston Fire Department, 1451 King St, Charleston, SC, USA
Contact: 00770 254 3900
Email: fireleadership@columbiasouthern.edu
For more information visit:
https://mycsu.columbiasouthern.edu

18 May – 12 June 2015
Sasol Secunda Chemicals Operations Emergency Management Training
Pump Operation Course
Sasol reserves the right to cancel courses without notice due to reasons beyond control
Venue: Sasol Secunda, South Africa
Contact: Isabel email: isabel.dejongh@sasol.com

20 - 22 May 2015
Disaster Management
Fourth International Conference on disaster management and human health: Reducing risk, improving outcomes
Venue: Istanbul, Turkey
For more information visit:
www.wessex.ac.uk/15-conferences/disaster-management-2015

21 May 2015
SAEC Basic fire/fire marshall
Training courses run by SA Emergency Care
Venue: Modderfontein, Johannesburg, South Africa
Contact: Nicole Vermaak
Tel: 011 608 0907

"I am a fire fighter"

I am neither a hero nor a superhero

I can be burnt by fire and smoke can overcome me

I can be exhausted by heat and frozen by cold

I can be trapped by collapse and fall from heights

I may sustain injury and even make the ultimate sacrifice for you

I will suffer all of these…. But if we do, I will never leave you!

I have trained hard and earned this, the proudest of titles….

I am a fire fighter!!!

By Kevin Wright
London Fire Brigade, retired
Courtesy of Rodney Berry, Emergency Services Chaplaincy, South Africa

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Kishugu, formely known as the FFA Group of Companies, consists of a number of divisions and companies to service our clients globally and in South Africa in the Integrated Fire Management sphere.

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- Fire management plans
- Prescribed burning
- Fire management training
- Wildfire research
- Wildfire risk management
- Fire spread modeling
- Incident management
- Fire detection systems
- Development and implementation of integrated fire management systems
- Development and implementation of aerial fire fighting and dispatch and coordination systems
- Fire management equipment
- Wildfire education and awareness
- Wildfire policy development
- Aerial fire fighting services

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