

FIRE AND RESCUE INTERNATIONAL

Integrated fire, rescue, EMS and disaster management technology

Volume 1 No 6



Western Cape
Government

Local Government



Scotty Roll n Foam

offers exciting advantages

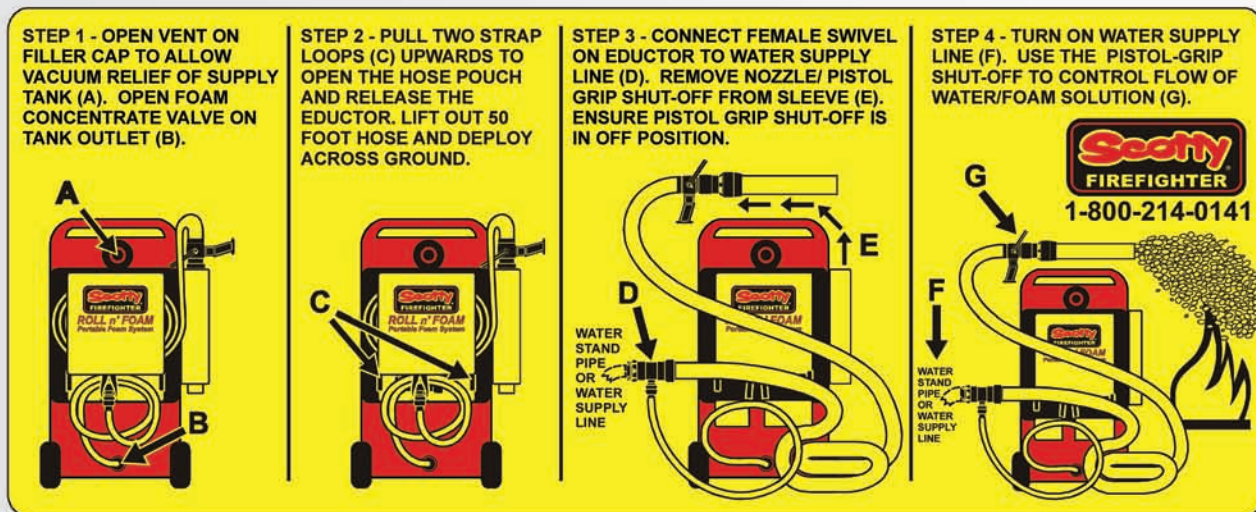
RFR is proud to introduce a new exciting product to the SA market "Scotty Roll n Foam"

Available for both Class A and Class B risks, the unit features easy to use fail safe operation even to an untrained person.

The unit features a 53lt foam tank with a handle on top and two wheels which allows the operator to tilt and roll the unit – much like a travel suitcase – so the 53lt container can be rolled to the point of attack effortlessly.

The unit is pre-connected to a hydrant outlet, and stays at this point ready for action. In the event of a fire, the unit is rolled out to the point of deployment whilst attached to the fire hydrant with a 30m lay flat fire hose. A 15m length of attack line and nozzle is stored in a pouch on the unit and is then deployed for the fire attack. The hydrant is opened supplying water through the foam inductor - also attached to the unit – which then mixes in the correct percentage of foam.

The operator merely opens the nozzle valve and points at the fire.



Who is the target market for this product?

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Small aerodromes and heli pads | Industrial sites and factories | Bulk fuel storage depots

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The unit will last at least as long as the foam lifespan: 10 years in the sun and 20 years in the shade
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Why do I need this?

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How much will this cost me?

R 5 750.00 excluding VAT
What is extra to get me going? – **All items can be supplied**
30m fire hose from hydrant to unit foam concentrate

For sales, service and information contact:
Marius Koekemoer Cell: +27 82 850 2601
e-mail: marius@rfrescue.co.za



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FIRE AND RESCUE INTERNATIONAL

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Editor

Lee Raath-Brownie
lee@fireandrescue.co.za

Advertising

Noddie Knibbs
advertising@fireandrescue.co.za

Kelly Mason

advertising@fireandrescue.co.za

Design and layout

Mael Sidonay
art@fireandrescue.co.za

Finance

Noddie Knibbs
accounts@fireandrescue.co.za

Circulation

subs@fireandrescue.co.za

Secretary

Petro Engelbrecht

Administration

Miriam Moroane

Contributions

Europe

Alex Held

Africa

Colin Deiner
Lenny Naidoo
Carol Campbell
Mike Assad
Rodney Trenam

Photography

Simon du Plessis

Publisher

Lee Raath-Brownie
FIRE and RESCUE INTERNATIONAL
Tel 011 452 3135/6
Fax 086 671 6920
Box 8299 Greenstone 1616

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Comment

We proudly present the sixth edition of Fire and Rescue International.

Cover profile

In this month's edition we feature the Western Cape Provincial Chief Directorate: Disaster Management and Fire Brigade Services. The Directorate recently announced changes in its wildland fire management strategy for the 2011/2012 fire season which forms the focus of the cover profile.



Lee Raath-Brownie

FRI Images photographic competition

Our fourth winner of the FRI Images competition is announced this month and won R2 000 cash! See page 3 for details.

CONGRATULATIONS!

Email us your high resolution photographs and you too could be a winner!

News section

Articles featuring the recent earthquake in Turkey, a horror bus accident in Knysna, South Africa, a ferry accident in Zanzibar, various tornadoes and the Thailand floods all form part of the news section in this issue.

Motor vehicle rescue

Colin Deiner, chief director, Disaster Management and Fire Brigade Services: Western Cape Provincial Government, submitted an interesting and motivational article on motor vehicle rescue and the 'golden hour'. Perhaps a timeous topic for discussion, the article discusses the right training, the right equipment, the right system and the right impact on these 60 minutes between life and death.

Technology

The recently launched Rural Fire Coordination Centre (RFCC) situated at the CSIR in Pretoria, South Africa, boasts the latest satellite fire detection and monitoring technology and will service the southern African region.

Other articles

Lenny Naidoo of Rural Metro Emergency Management Services, Pietermaritzburg, South Africa, writes about the fire fighter life safety initiatives program: Everyone goes home.

We also feature the latest technology launched at the recently held Johannesburg International Motor Show (JIMS) in South Africa.

The FRI Poem for the month was written and submitted by Rodney Trenam of the Fire and Emergency Services in Pietermaritzburg, South Africa. The poem is a very touching memorial of a truly tragic accident.

Fire and Rescue International is your magazine. We serve those who serve others. Share your experiences, ideas and suggestions with fellow members.

Keep those suggestions, emails, photographs and phone calls coming!

Let's serve together!

Lee Raath-Brownie
Publisher

This month's FRI images winner!



Calling all budding photographers! We want your photographs!

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

The rules are simple:

- All photographs submitted must be in jpeg format and not bigger than 4 megabytes.
- Photographs must be in high resolution (minimum 1500 pixels on the longest edge @ 300dpi) for publishing purposes
- **Allowed:** cropping, curves, levels, colour saturation, contrast, brightness, sharpening but the faithful representation of a natural form, behaviour or phenomenon must be maintained.
- **Not allowed:** cloning, merging/photo stitching, layering of two photos into one final frame, special effects digital filters.
- Fire and Rescue International (FRI) reserves the right to publish (printed or digitally) submitted photographs with acknowledgement to the photographer.
- Winners will be chosen on the merit of their photograph.
- The judge's decision is final and no correspondence will be entered into afterwards.
- Brief description should accompany photo.

Entries must include: >>ENTER NOW!

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.



Congratulations to

Photographer
John Mössner

Name of photograph
Stack them up and fill them up!

Photo description:
Bush fire in the mountains above Dieu Donne, Franschoek, South Africa on 8 January 2010, where access was difficult.

By timing their trips and filling quickly, the pilots could douse the fire regularly, and so managed to bring it under control before last light!

Camera: Nikon D90
Lens: 18-105mm at 25mm
Shutter speed: 1/350
Aperture: F9.5
ISO: 1000

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

Well done!



Fynbos fire on Signal Hill in December 2010

Western Cape changes wildland fire management strategy for 2011/12

The Western Cape Provincial Chief Directorate: Disaster Management and Fire Brigade Services recently announced changes in its wildland fire management strategy for the 2011/2012 fire season.

"With the 2011/12 fire season upon us, the Western Cape Provincial Chief Directorate: Disaster Management and Fire Brigade Services, have embarked on a new strategy for the deployment of aerial fire fighting assets", confirms Colin Deiner, Chief Director of the Directorate.

The plan was developed by the Provincial Fire Working Group which consists of all agencies involved in managing and combating wildland fires in the province. The strategy entails the deployment of 24 aerial fire fighting aircraft into various high risk areas for the duration of the season. The aircraft will provide

a rapid response mechanism for incident commanders.

It is envisaged that a four aircraft response will be deployed to any potentially large fire within the first hour in an attempt to force a quick extinguishment and prevent any further spread of fire.

Aircraft will be strategically placed in eight locations stretching from the West Coast to Eden District and each first response will consist of one spotter aircraft, two bomber aircraft and one helicopter. These aerial resources will be supplied by the Working on Fire fleet and will function in conjunction with the District Fire Services as well as the various ground support teams.

"The system is based on the Los Angeles County Fire Department aerial response protocols and, we believe, can make a substantial

difference to protecting the lives and property of the people in the Western Cape," concludes Deiner. The establishment of fire protection associations (FPA's), has created a structure for integrated fire management and control. Working on Fire has provided ground teams to the FPA's and when these work in tandem with aerial resources this, provides for the greatest impact for extinguishing wildland fires.

The focus for the Western Cape this coming season will be on initial attack. This will ensure that aerial resources are airborne minutes after the report of a fire is received by the dispatch centre. By implementing this system, fires are attacked while they are still relatively small and the chances of extinguishing them early, is much greater.

In the past, aerial resources were requested up to five hours after ►



A striking photo that appeared on the Fynbos Hub website in their Fynbos Fire Diary section. The photo was aptly named 'the day after the fire'

► fires had started and on their arrival at the fires, the aerial resources were confronted by wildland fires with burning flanks up to five kilometres long.

In 2010 four fixed-wing bombers were re-introduced to the Cape and their performance was so effective that the Western Cape Provincial Chief Directorate decided to double the number of bombers for the coming fire season. The Directorate predicts a severe fire season due to high fuel loads from the past rains and climate change.

Strategically placed runways have now been established across the Western Cape and will form a platform from which these aircraft will operate. Dispatch and coordination centres have also been established across the province to ensure that resource requests are dispatched immediately.

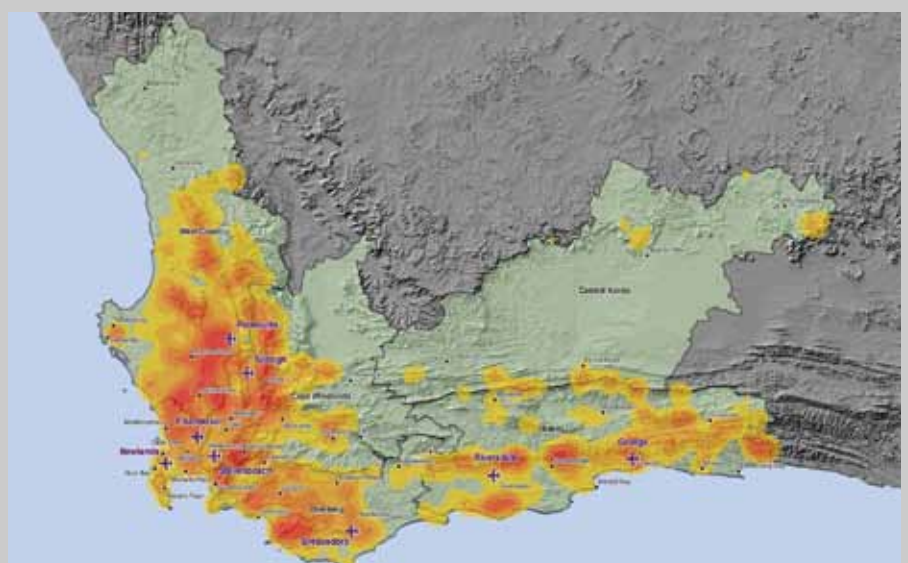
The Disaster Management and Fire Brigade Services Chief Directorate is responsible for facilitating disaster management and coordinating fire brigade services. Its functions include the establishment and

maintenance of an institutional disaster management capacity and to implement effective risk reduction activities.

The Directorate is also responsible for the preparation and response to disasters and coordinate disaster recovery and the coordination of the provincial fire brigade functions and capacitating municipalities in its jurisdiction. ▲



The majority of aircraft was supplied by FFA Aviation



This map indicates the placement of the aircraft in relation to the high risk areas which are colour coded, red being the highest



Turkey struck by two major earthquakes

Rescue workers worked tirelessly to find survivors

More than 1 000 people were feared dead after southeast Turkey was struck by two major earthquakes, the first a 7,1 and the second a 5,7 magnitude. Over a 1 500 aftershocks followed hampering rescue efforts and collapsing already weakened structures.

The Van earthquake was a destructive magnitude 7,1 Mw earthquake that struck eastern Turkey near the city of Van on Sunday, 23 October 2011. It occurred at a shallow depth of 20 km, causing heavy shaking across much of eastern Turkey and lighter tremors across neighbouring parts of the South Caucasus and Levant. According to Disasters and Emergency Situations Directorate of Turkey (AFAD), the earthquake killed more than 600 and injured over 4 200 people. At least 11 232 buildings sustained damage in the region, 6 017 of which were found to be uninhabitable. The uninhabitable homes left at least around 60 000 people homeless.

There has been 1 561 aftershocks above magnitude 2 Mw by the end of October 2011.

Impact

The earthquake and its aftershocks affected much of eastern Turkey, demolishing hundreds of buildings and burying numerous victims under the rubble. Erciş, a town near Van, was hardest hit by the violent shaking; at least 55 destroyed buildings, 45 fatalities, and 156 injuries occurred in the town alone. Most of the buildings collapsed along the town's main road and were residential, raising the possibility of a higher death toll. In smaller villages near the epicentre, the shaking demolished almost all the brick houses.

In the city centre of Van, at least 100 people were confirmed dead, and 970 buildings collapsed in and around the city. About 200 inmates escaped after the walls of a prison succumbed to the shaking, although 50 were quickly recaptured.

The death toll was caused primarily from building collapse in urban areas.

Response

The Turkish government responded to the disaster with 1 275 personnel, 174 vehicles, 290 health officials, 43 ambulances, and 6 air

ambulances. Local people also joined the rescue action, some using their bare hands. Survivors and opposition politicians have criticised the crisis management of the Turkish government.

The Disasters and Emergency Situations Directorate of Turkey (AFAD) announced that 13 million TL (around \$7 million USD) has been spent so far in terms of emergency relief efforts. Another 8,6 million TL (just under \$5 million USD) has been donated via charity.

External aid to the affected area brought the number of search and rescue officials to 4 440, medical personnel to 1 710, search dogs to 18, construction equipment and vehicles to 651 which includes 146 ambulances, rescue choppers (air ambulances) to seven. 25 185 tents sent by Turkish Red Crescent Society were distributed. Three meals a day are being provided with distribution of hot meals. 30 field tents have been set up for public services and psychosocial trauma support.

The United Nations (UN) and various other aid organisations including ▶



Earthmoving equipment assisted in the rescue operations

- ▶ several within the International Red Cross, sent thousands of tents as well as blankets and mattresses.

Second earthquake within three weeks

The second earthquake with magnitude Mw 5.7 and a depth of 94 kilometres hit near Van on 9 November 2011, causing more than 40 deaths and hundreds of injured. Among the buildings collapsed second earthquake was the Bayram Hotel, which hosted some journalists and rescue workers. Some journalists trapped in the rubble sent text messages asking to be rescued. A Japanese aid worker was reported dead.

Residents in Van joined in a frantic search, using hands and shovels and working under floodlights and flashlights, hearing voices of people buried alive calling from under mounds of rubble.

There were reports of more bodies being pulled from rubble in villages outside Van. One village chief told the media: "Nobody has reached us, we have received no medical aid, and the tents they sent are plain canvas. We are freezing."



Locals used their hands to move rubble to free trapped victims

International offers of aid poured in from NATO, China, Japan, the United States, Azerbaijan, European countries and Israel.

Regular quakes

There are major geological fault lines cross Turkey and there are small earthquakes almost daily. Two large

quakes in 1999 killed more than 20 000 people in northwest Turkey.

An earthquake struck Van province in November 1976, with 5 291 confirmed dead. Two people were killed and 79 injured in May this year when an earthquake shook Simav in northwest Turkey. ▲

Horror bus accident, Knysna, South Africa

16 people died, 15 of them children, while 42 were injured when a school bus plunged off a bridge and into a river in Rheenendal, outside Knysna, Western Cape police in South Africa reported.



The ill-fated bus at the accident scene in Knysna



Rescuers survey the grim scene after 15 children and their driver died when an overloaded school bus crashed into a river

The children were killed when the driver lost control of the bus they were traveling in and plunged into a river at Kasat's drift. The bus driver was also killed.

The SA Police Services, a Police dive unit, Metro EMS ambulances, Metro EMS rescue squads, the Metro EMS Red Cross AMS helicopter, NSRI Knysna rescue swimmers, Knysna Fire and Rescue Services, Eden Disaster Management, private ambulance services and the forensic pathology services all responded to the scene.

Divers searched the waters and brought the bodies to the surface one by one. They were placed, covered in white blankets, next to one another on the bridge. "The scene had been cleared and divers had stopped searching the water for bodies by late afternoon," police spokesman Captain Malcolm Pojie.

The children were pupils at the Rheenendal Primary School and aged between seven and 14.

The injured were taken to Knysna provincial hospital with back and neck pain, and mild hypothermia,

emergency services spokeswoman Kerry Davids said.

The Federation of Unions of SA said it noted with "grave concern" that the accident was believed to have been caused by brake failure, general secretary Dennis George said.

Pojie was unable to confirm whether the brakes had indeed failed.

Only the rear of the bus was sticking out of the water, ER24 spokesman Andre Visser said shortly after the crash. Social workers and psychologists were on the scene counselling parents, school staff and children.

South African President Jacob Zuma expressed his shock at the horror crash.

Western Cape transport MEC Robin Carlisle said the tragedy came the day before the anniversary of the Blackheath taxi crash in which 10 children were killed last year. Their minibus taxi was hit by a train after jumping a line of cars stopped at a level crossing at Blackheath, Cape Town.

The Western Cape Education Department launched an investigation into the reason why a 32-seater bus was used to transport 58 school children involved in this horror crash in Knysna, MEC Donald Grant said.

"According to our records the vehicle approved for transport on this route is a bus that seats 67 learners," Grant said in a statement.

"Sixty-five learners are registered on this route in our learner transport scheme. However, the bus involved in today's accident is a 32-seater bus, which is usually assigned to another bus route," he said. There were only limited circumstances where buses could be substituted, Grant said.

At least 60 people have died in six accidents throughout the country this month, Transport Minister Sibusiso Ndebele said in a statement. "We cannot go on like this. This horrific road crash in Knysna... is yet again an unnecessary loss of lives," he said. Ndebele confirmed that the Road Traffic Management Corporation had sent an accident investigation team and reconstruction specialists to help probe the crash. ▲

Fire engines made epic journey from South Wales to Serbia

Most emergency trips do not take five days, cross seven countries and start and finish with the cheers of supporters. This 2 415 kilometre lifesaving dash to Eastern Europe took a little longer than most fire fighters' normal emergency call outs.

Yet the mission to take six old fire engines from South Wales to Serbia to supplement the Eastern European nation's fire fighting force was no ordinary 999 call.

Following the approval of South Wales Fire and Rescue Service to recycle old fire engines by sending them to Serbia for a 'new lease of life', station manager Steve Logan, the 'Serbia Crew' and his convoy of six appliances set off from Caerphilly castle, Wales to make the very important delivery.

Assistant chief fire officer, Huw Jakeway said: "The decision to recycle unwanted appliances rather than scrap them comes as the service is just about to take charge of several new ones. The new models will replace ones which have been used at fire stations throughout South Wales for at least the past 15 years."

"Some older stock will be transferred to other stations and some models will be put aside as 'stand-by' machines. But part of the old fleet was sent to Serbia to help replace its out-dated machines – some of which are converted 1950s Russian Army trucks."

Jakeway continued: "This is an ethical way to use end of life appliances and equipment while supporting developing countries."

The team of 16 drivers included four women, two of whom had only passed their tests a few weeks earlier thanks to sponsorship from Big Wheelers Ltd of Cardiff, Wales, United Kingdom.

Their first day took the team to Calais, and went smoothly. From there they drove to Koblenz, Germany, where they received a blue light escort into the city by local fire fighters who waved them off towards Passau the next morning.

In Passau, Germany, they met two team members – Police Inspector Kevin Short and Steve Kitchin, from sponsors QDL Contractors Ltd – who had flown out to join the convoy.

They were met on the Austrian border by their fire service who escorted the team through to Hungary.

In Budapest, Dr Patric Lausch of the Hungarian emergency services, hosted the team in the city centre. They were held up at border controls at Serbia for almost three hours, despite having the necessary paperwork and having been met at the border by some of Serbia's top fire chiefs.

It meant they were running late to reach their destination, Ruma fire station, 65 kilometres from the country's capital Belgrade, so with permission from their fire service we used our lights and siren running through red lights as police blocked off roads along our route.

When the team reached Ruma fire station, they were given a warm welcome, including family, colleagues and members of Caerphilly scouts who had flown ahead to greet them.

They handed over the six trucks at Ruma fire station and Serbia's Deputy Prime Minister Ivica Dacic thanked the South Wales team.

Tim Pedrick, a fire service station manager who lives in Ystrad Mynach in Wales and who plotted the journey, said: "They have limited fire fighting equipment so they will greatly benefit from the project."

All team members financed their own trip and the cost of taking each fire engine over was paid through sponsorship from local businesses. ▲



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Hundreds drown in Zanzibar ferry accident

Nearly 200 people drowned when an overloaded ferry capsized off east Africa as it sailed from Zanzibar to Pemba Island, Tanzania's worst maritime disaster in at least 15 years.

Fishing boats, tour operators and diving instructors spent the night scouring the sea off the coast of Tanzania looking for survivors, many clinging to strewn cargo. One photo showed two men and a child floating on a mattress, clinging to a fridge.

Zanzibar police spokesman, Mohamed Mhina, said 192 bodies had been recovered and 606 passengers were rescued from the Indian Ocean.

"There is a possibility that more bodies still remain at sea," Mhina stated.

Two tug boats docked at Zanzibar's port, one carrying 17 bodies and another with 15 bodies, many of them children.

Survivors

Passengers on the aging, crowded boat headed for one of Tanzania's top tourist destinations said they realised something was wrong when the overnight ferry began to list from side to side.

Then water rushed through and killed the engines, sending the MV Spice Islanders upside down and pitching hundreds of people into the deep sea.

Those lucky enough to find something to cling to floated in the dark waters for at least three hours until the strong currents began to wash them up on the white sandy shores of Zanzibar.

As the sun rose, news of the tragedy had already spread throughout the community and thousands of people were on the beach, desperately hoping their family members would be the next to emerge from the waves. One man – too upset to give his name – screamed over and over again the names of 25 missing family members, including his sisters, wife and grandsons.

Throughout the day, police waded through the clear waters to shore, carrying bodies on stretchers, wrapped in brightly coloured cloth and blankets. The smallest bundles – the children – they carried in their arms. Tourists on the popular island helped survivors and local charities provided blankets and tea.

It's unclear how many people were killed or how many people were on the boat when it capsized.

Rescue worker, Ali Ramadhan, told press at the port. "We suspect the ship was overcrowded with more than 800 passengers on board. It is

normal for these ferries to overload passengers and cargo."

Overloading possible cause

Zanzibar police commissioner, Mussa Alli Mussa, said that more than 500 people were on the ship's manifest. Abdual Said, registrar of Zanzibar's seafaring vessels, said the MV Spice Islander was licensed to carry 600 passengers.

The vessel had been sailing from Zanzibar to Pemba, the two main islands of the Zanzibar archipelago, a semi-autonomous region of Tanzania and popular beach destination for tourists.

Rescue worker Ramadhan said a lack of equipment hampered rescue operations. "A helicopter helped to rescue some survivors but with the high tide coming in some of the bodies drifted as far as (the Kenyan port city of) Mombasa," Ramadhan stated.

A stream of military trucks brought in bodies to the Maisara football grounds in Zanzibar's main city, where tens of thousands of people gathered to identify the dead.

Emergency workers covered bodies in dark blankets and placed the ►

Rare 'fire tornado'

spotted near Langdon, North Dakota



The rare 'fire tornado' in North Dakota

A small grassland or slough wildfire southwest of Langdon, North Dakota in the USA appears to have spawned what the US National Weather Service calls an 'interesting and obscure phenomena'.

Meteorologist, Greg Gust, says that the rare 'fire tornado' touched down on Monday, 24 October 2011 north of Loma, North Dakota. Gust says the whole fire event was short-lived, occurring between 14h55 and 15h05.

Langdon photographer and SkyWarn spotter Kelly Schwartz reported the tornado and starting taking some pictures of the odd-looking formation.

"A fire whirl generally forms when superheated air near the surface of a large fire zone rises rapidly in an air mass where sufficient horizontal or vertical vorticity is also present. Much like a dust devil or whirlwind, the rapidly rising air above a wildfire can accelerate and turn the local vorticity into a tight vertical vortex,

now composed of fire instead of dust. Whereas the dust devil will often mix out its local temperature discontinuity and the vortex dissipate rather quickly, over a few minutes or less, the wildfire zone can help maintain a fairly long-lived fire whirl lasting for several minutes or more," states Gust.

"A fire tornado would be a much more extreme example, and involve a fire whirl that had stretched vertically from the ground up to the base of developing cumuliform clouds. Fire tornadoes form when heated air near the surface of a fire rises rapidly into a part of air that has horizontal or vertical 'vorticity'," concluded Gust.

Mike Umscheid, with the US National Weather Service office in Dodge City KS, gave a meteorological explanation and example of how this process initiates.

Their detailed analysis of the Langdon event will take some time to complete, but preliminary

information suggests that similar ingredients are present as follows:

1. The fire zone heating produced the rapidly rising air
2. The lower level winds had enough environmental shear to induce a vertical vorticity near the surface and get the fire whirl going, and then sustain it. In addition, we suspect that at least two additional factors were in play, as follows:
3. Low level moisture was sufficient to rise, cool, condense and form the pyro-cumulus cloud deck
4. The lifted condensation level (LCL) was close enough to the level of free convection (LFC) so that the developing pyro-cumulus quickly became a towering cumulus... which may have increased the overall up draft speed and vertical vorticity to such an extent that the near surface fire whirl stretched into a fire tornado.

According to local observers, the pyro-cumulus cloud developed quite quickly above the fire zone as the ascending smoke plume then took on its whirl. ▲

► victims' clothes on top so relatives could identify them.

Hundreds of people gathered outside the main Mnazi Mmoja Hospital where medical workers read out the names of survivors and posted lists on hospital walls.

At the tourist destination of Nungwi at the northern tip of Zanzibar, fishing boats and diving vessels ferried survivors ashore. Crowds waded waist deep into the water as the boats approached, desperately seeking relatives.

Pemba is about 40 kilometres from Zanzibar. Passengers who regularly

take ferries between the two islands said the vessels are in a poor state and often overcrowded.

"They normally pack us in like sardines in a can. And for that I really fear this could be a very big disaster," said resident Mwnakhamis Juma.

The government announced three days of mourning and Tanzanian President Jakaya Kikwete postponed a trip to Canada.

The government in Zanzibar said last month it planned to invest in bigger, more reliable vessels to ferry passengers between the two islands. "We are fearing the greatest

calamity in the history of Zanzibar. This is a disaster," said a government official, who declined to be named.

Tanzania's worst maritime disaster was in May 1996 on Lake Victoria, Reuters reported. The MV Bukoba ferry sank with as many as 1 000 people on board. Only 114 passengers survived and the captain and eight officials were charged with the murders of 615 people.

Two small overloaded boats capsized and were swept away in high seas off Tanzania's coast in January this year. In May 2009 a vessel just off Zanzibar sank with dozens aboard, killing six. ▲



Tornado kills two, injures 200 in South Africa

Two children have been killed and hundreds of people were left homeless as tornadoes ripped through the South African towns Duduza near Johannesburg and Ficksburg in the Free State.

Ficksburg

The SA Red Cross (SARCS) assisted Ficksburg residents after a tornado hit the eastern Free State town, an official said. "SARCS conducted assessments and provided assistance to those in need," spokesperson Mamojela Mafa said.

A nine-year-old boy was killed in the town when the wall of his house collapsed on him during the storm, police spokesperson Captain Phumelelo Dlamini, stated. The tornado hit and destroyed Jama Mokhekhe's house, seriously injuring other members of his family. Another 42 people were injured and 122 Reconstruction and Development Programme (RDP) houses and shacks in the area destroyed.

Within hours of the storm flattening Ficksburg's Meqheleng informal settlement, the town's disaster relief plan had been activated, with emergency personnel responding from across the province.

Netcare 911's Chris Botha said the area looked like a disaster zone with "houses flattened as far as one could see".

"From reports we received from our personnel on the ground it was a total disaster. Everywhere one looked there was debris. We assisted with the transport of 42 patients who were injured in the strong winds,

which killed a nine-year-old boy. Two residents were seriously hurt."

Botha said the boy died of severe trauma to his internal organs and multiple injuries caused by flying debris. The injured, who had been struck by debris and left with severe lacerations and broken bones, were taken to several local hospitals.

"A massive overnight search and rescue operation was launched to find people who have been reported missing. Also, to look for residents who have been injured and may be trapped under the wreckage of their homes".

Botha said that apart from sending paramedics from Ficksburg to the Meqheleng informal settlement, staff had been dispatched from the base in Bethlehem. They had been joined by medical teams from other parts of the Free State.

Tornadoes in spring and summer were not uncommon, said South African Weather Service forecaster Puseletso Mofokeng. "It happens from time to time. Over the past three years it has happened on a yearly basis."

He said some of these tornadoes set down in unpopulated areas. "It's only when they reach cities that we notice them."

Mofokeng said tornadoes were more common in the central Eastern Cape, KwaZulu-Natal and the Free State than in other provinces.

He said small low pressure systems known as mesocyclones caused severe storms, which could result in tornadoes.

Nigel

The tornado-swept town of Duduza, near Nigel, south-east of Johannesburg, was declared a disaster area, Ekurhuleni Mayor Mondli Gungubele said.

An 8-year-old child died and over 160 people were injured when the storm tore through the township. Hundreds were left homeless and spent the night at a local multi-purpose centre.

Gauteng health MEC Ntombi Mkgwe said six people were arrested for looting homes in the aftermath of the disaster. "This is the first time that something like this happened in the area. Everyone panicked, and no-one knew what was going on."

Mkgwe said she was inspired by the actions of residents during the night. "I saw a young lady carrying a child that was not her own. The child was injured and she said she would take him to the hospital while his mother sorts out her home," she stated.

Poorly-constructed houses

Gungubele said the cost of the damage still had to be assessed.

Democratic Alliance (DA) Member of Parliament (MP) Jack Bloom said an investigation had to be done into poor construction of RDP houses. "The houses were poorly constructed. The walls were not reinforced. And it's these things that have caused most of the injuries. There was no cement between the bricks, and they fell apart... It's almost as if you can build a new house from the same bricks."

Hundreds of people were left homeless.

Tornadoes, including damaging ones, are not uncommon in South Africa. The KwaZulu-Natal region has been particularly vulnerable in the past, with 8 killed and over 200 injured in November, 2008 and one killed, over 30 injured in November of 2009.

In March of 1999, a tornado that was termed 'multiple vortex' tore through the suburbs of Welkom in Free State region, with over 4 000 structures reported as severely damaged or destroyed. ▲

Changing weather patterns

a concern as WoF wildland fire fighters gear up for Western Cape fire season

by Carol Campbell

South Africa's winter wildfire season ran over the predicted schedule this year while the summer wildfire season in the Western Cape started early, an indication that climate change is being felt in a very real way on the ground.

The northern, central and eastern parts of the country traditionally burn in the dry winter months from May to October while the Western Cape battles wildfire in the hot and windy summer months.

The southern Cape has a ten-month long fire season with short respites in very wet weather. November is traditionally a time when Working on Fire's (WoF) wildland fire fighters and FFA Group fire fighting pilots across the country rest and equipment is checked and serviced.

This year that rest has been disrupted as wildfires continued to burn in the Free State, North West and Northern Cape while several major wildfires burned in the Western Cape, a month before the start of its wildfire season.

The Working on Fire Programme (WoF), funded by the South African Government and implemented by the FFA Group, is one of South Africa's most successful poverty alleviation, job creation and community upliftment initiatives.

Through the programme young men and women are recruited and trained as skilled wildland fire fighters to be deployed throughout the country to reduce the personal and economic harm caused by unwanted wildfire. There are currently more than 3 000 people deployed at more than 100 WoF bases across South Africa.

At the fifth Global Wildfire Conference, which took place in South Africa in May this year,



Photograph: Working on Fire

Skills training and fitness is of the utmost importance for fire fighter survival

wildfire was acknowledged as a major cause and consequence of climate change. South Africa was commended for its work in controlling wildfire particularly the Working on Fire Programme, implemented on behalf of Government by the FFA Group.

Now, with COP17, the United Nations Earth Summit's 17th Congress of the People, taking place in Durban from

28 November to 9 December 2011, the impact of wildfire on changing weather patterns, and vice-versa, is again on the agenda.

The data generated by Working on Fire, specifically this year, shows that wildfire is beginning to overlap traditional burning seasons and, in turn, wildfire is being acknowledged as a cause of changing weather patterns. ▶



Increased aerial support for the summer fire season in the Western Cape



Photographs: Working on Fire

Late winter fire season for most of South Africa

► David Bowman, professor of forest ecology at the University of Tasmania, and lead author of a paper that was published in the journal *Science* in 2009 said: "Fire is a feature of our planet...high levels of fire activity has the capacity to change climate."

In his research Bowman explained that as vegetation burns, it releases stored-up carbon into the atmosphere which speeds global warming and exacerbates conditions that generate wildfire.

For South Africa's wildland fire fighters, the changes in climate have, in recent seasons, become tangible. Graham Barlow, WoF's general manager in the Western Cape, said the region had 50 per cent less rainfall than normal this winter.

"Vegetation is dry which means more wildfire and too much wildfire damages the fynbos allowing alien species to become established. Once aliens are established wildfire becomes a regular occurrence, it's a vicious cycle."

Etienne du Toit, deputy director of the fire brigade service for the Western Cape provincial government, said emergency services and partner organisations were prepared for 'any credible scenario' this year.

"You can never tell what is going to happen on any given day but our systems are in place", confirms du Toit.

Included in the planning was an increase in the number of fire fighting aircraft in the province.

Eight helicopters, eight fixed wing bombers and eight spotter aeroplanes will be stationed across the region. The Provincial Disaster Centre in Tygerberg, Cape Town is also using satellite technology to monitor the outbreak of wildfire.

"The aim is to get wildfires controlled quickly," said du Toit.

In the Free State, WoF general manager, Roelof Geysers, said the number of hectares burned this year was a little higher than the ten year average of 250 000 ha.

"What is interesting is that completely different areas have burnt", Geysers stated. Whether or not this was due to changing weather patterns remained to be seen.

Geysers added that the Free State had not had the 25 millimetre of rain needed to call an end to the fire season.

"That's also unusual and concerning," he said.

In Limpopo, WoF general manager, Sam Maepa, had his boots off and his feet up.

"We've had 100 millimetre of rain and despite more wildfires being reported this season than the previous year, there were none that lasted over 24 hours," he said. Last year there was a wildfire that lasted six days.

Maepa said wildfire reporting in the province had improved, an indication that awareness

campaigns were having an effect. "The province is well covered by Fire Protection Associations (FPAs) which means people are working together in a more co-ordinated way to keep wildfires under control. I also think landowners have learnt some hard lessons from previous wildfires", Maepa detailed.

Trevor Wilson, WoF general manager in Mpumalanga, said there had been days on the Highveld this winter when the Fire Danger Index was 100 per cent, which was unusual.

"When you have winds of 100 kilometres per hour, there is very little you can do to hold a wildfire back," he said. Nevertheless, the province's 14 FPAs were working well with good fire detection in place and good initial response.

"We do have very mature FPAs in the region due to the forestry industry, who have handled wildfire for many years", Wilson said.

Chris Barnard, Working on Fire's national co-ordinator and regional fire centre co-ordinator, said the number of wildfires attended nationally by WoF in August, the peak of the winter fire season, had increased year-on-year but the hectares destroyed were less. In 2010 WoF attended 411 wildfires in August and in 2011 it fought 455 fires. The number of hectares destroyed dropped from 38 280 to 28 505. Aircraft were called to assist at 55 fires in August 2010 and 33 in August 2011.

"Despite the increase of wildfires, the decline in damage done and ►

US Government

issues expanded life-threatening disease list and reporting guidelines

The Centres for Disease Control and Prevention (CDC) director's office has approved updates to the Ryan White Life Threatening Disease List and Reporting Guidelines.

A provision to the Ryan White HIV/AIDS Treatment Extension Act (S.1793), passed by the United States (US) Congress in 2009, restored notification requirements for emergency response personnel exposed to infectious diseases while on duty. The Ryan White Act HIV/AIDS Treatment Extension Act of 2009 addresses notification procedures for exposure of emergency responders to potentially life-threatening infectious diseases.

The legislation also required the US Secretary of Health and Human Services to update the list of diseases for which notification would be required. Secretary Kathleen Sebelius delegated the authority to issue a list of these diseases to which

emergency responders may be exposed on the job, to the Centres for Disease Control and Prevention (CDC), which in turn assigned the completion of the regulations to the National Institute for Occupational Safety and Health (NIOSH).

The previous list of potentially life-threatening diseases failed to take into account new and emerging infectious diseases that International Association of Fire Fighters (IAFF) members may be exposed to on the job through blood-borne or airborne pathogens while transporting patients and providing pre-hospital care.

The CDC has also developed a topic page about the Ryan White Reauthorization, which includes additional background information, procedures, resources and contact information.

The CDC Director's Office approved updates to the Ryan White Life Threatening Disease List and

Reporting Guidelines recently, which include the addition of emerging infectious diseases advocated by the IAFF. The IAFF provided extensive comments to the docket regarding these guidelines and requested the inclusion of additional diseases under these guidelines including, hepatitis C virus, vaccinia virus, measles, varicella (chicken pox), mumps, rubella, severe acute respiratory syndrome (SARS-CoV), anthrax, pertussis (whooping cough) and novel-influenza. The updated list also includes a new category for diseases that can potentially be used for bioterrorism or biological warfare. The new list of diseases and guidelines will be effective 2 December 2011.

"The approval of these regulations and the inclusion of these additional diseases is an important victory for the IAFF and will greatly enhance the health and safety of our membership," says IAFF General President Harold Schaitberger. ▲

► the number of fires needing air support shows that the impact FFA Group subsidiary, Integrated Fire Management Services, is having on wildfire," said Barnard.

Integrated Fire Management Services is a Private (Limited) company under the umbrella of the FFA Group. It provides a comprehensive chain of organised strategies and interventions to help prevent, eliminate and mitigate the negative impact of veld and forest fires while taking into account wildfires as a natural occurrence.

South Africa is a world-leader in the use of integrated fire management which include fire awareness and prevention activities, fire detection, dispatch and coordination services, fire suppression and damage rehabilitation.

The remarkable impact of the Working on Fire Programme cannot be underestimated.

"WoF's wildfire education programmes are getting through to communities, FPAs are working together and, where WoF's 'Hotshot' ground teams are brought in, wildfires are controlled before they become established," said Barnard. Pre-season training in the Western Cape.

In the meantime it will be full alert for wildland fire fighters as the Western Cape enters its most risky time of year.

An estimated 600 wildland fire fighters in the WoF Programme in the province completed their annual pre-season training in Swellendam at the beginning of November 2011. WoF's "Hotshot" teams were taken through their paces to improve fitness, wildfire fighting skills and survival skills. They are available to support partner organisations and FPAs in the event of a wildfire. Across the rest of the country weary WoF wildland fire fighters remain on

standby should their comrades in the Western Cape need support.

As Sam Maepa of WoF Limpopo said, "My boots are off but I am keeping them next to my bed." ▲



Photograph: Working on Fire

WoF's "Hotshot" teams were taken through their paces to improve fitness, wildfire fighting skills and survival skills in November in preparation for the upcoming fire season



Monsoon rains flood Thailand

Local residents row their boats through the chest-high flooded streets on the outskirts of Bangkok

Major floods occurred during the 2011 monsoon season in Thailand, most severely in the Chao Phraya but also in the Mekong River basin.

Beginning in late July and continuing for over three months, the floods have caused more than 600 reported deaths by early November, affected

over 3,2 million people, and caused damages estimated at more than 185 billion baht (6 billion USD) to date.

The flooding has inundated about six million hectares of land, over 300 000 hectares of which is farmland, in 58 provinces, from Chiang Mai in the North to parts of the capital city of Bangkok near the mouth of the Chao Phraya.

It has been described as “the worst flooding yet in terms of the amount of water and people affected. Seven major industrial estates have been inundated by as much three meters of water.

By the beginning of October, most dams were already near- or over capacity and being forced to increase their rates of discharge, potentially worsening downstream flooding. Flooding in Ayutthaya worsened as flood water entered the city proper, inundating the Ayutthaya Historical Park and forcing evacuations. Barriers protecting industrial estates failed, resulting in flooding of dozens of major factories and country-wide disruption of manufacturing supply chains. In Nakhon Sawan, the sandbag barrier protecting the city was breached, resulting in rapid flooding of the city. Hundreds of patients had to be transferred out of Ayutthaya and Nakhon Sawan Regional Hospitals by boat as water levels rose over the hospital floors and power supplies and life support systems were disrupted.



Vehicles are parked on a bridge in a flooded residential area in Bangkok's suburbs

The drama of the flooding around the Bangkok area and its financial ►



A helicopter surveys the extend of the floods

► costs captured most of the headlines. However, significant flooding occurred in late 2011 in Thailand's southern provinces. Nine provinces were being affected by flash flooding due to rains that occurred in November 2011. Saba Yoi, Khuan Niang, Rattaphum and Singha Nakhon districts were declared disaster zones after flood waters covered nearly all areas as high as five meters deep. Southern coastal areas were also affected by high waves.

Centralised flood monitoring and relief operations began in mid-August. Prime Minister Yingluck Shinawatra, appointed early-August, made tours of flood provinces and assigned cabinet members and members of parliament to visit affected people, pledging support to local administration organisations. The 24/7 Emergency Operation Centre for Flood, Storm and Landslide was set up under the Disaster Prevention and Mitigation Department of the Ministry of Interior to coordinate warning and relief efforts. The government also allocated extra flood-relief budgets to the affected provinces. The

Prime Minister has also pledged to invest in long-term prevention projects, including the construction of drainage canals.

The armed forces have been mobilised to distribute aid to affected people, and civilian groups and organisations are also involved,

with volunteers packing sustenance kits and delivering aid to some areas. A Flood Relief Operations Centre (FROC) has been set up at Don Mueang Airport to coordinate the delivery of aid, superseding the Emergency Operation Centre because it could not exercise adequate authority. The stadium ►



The effects of the flood will be felt long after the water has subsided



Flooding of Rojana Industrial Park, Ayutthaya, Thailand

► at Rangsit Campus of Thammasat University is serving as a shelter for evacuees, mostly from Ayutthaya. However, many people in the flooded areas are refusing to leave their homes for fear of looting.

Employment was affected when factories flooded and workers were either laid off or fired. Not all factories are expected to reopen causing significant long term job loss in Central Thailand.

Sanitation concerns

Effects of the trash and sewage within the waters are expected to peak when waters subside leaving behind stagnant pools of water. A spokesman for the United Nations International Children's Emergency Fund (UNICEF) encouraged everyone to stay out of the waters as much as possible. Since a household sanitation system won't operate under flood water, individuals that remained in flooded areas, both exposed themselves to risks, and increased the risks for those living downstream by continuing to generate more sewage and trash in waters carried downstream.

Thai Red Cross

Many communities across the country have been isolated for weeks, relying on local authorities and organisations like the Thai Red Cross for basic assistance.

The situation is particularly difficult for the country's migrant workers. There



Vehicles are submerged at the Honda factory in Ayutthaya province.

is believed to be as many as three million migrant workers in Thailand, many of them working illegally. Without documentation, they are often invisible to authorities and humanitarian organisations and are missing out on assistance.

"Migrant workers are the most vulnerable," explains Dr Pichit Siriwan, deputy director of the organisation's Relief and Community Health Bureau. "Because they sometimes work illegally, they are not on lists. They don't exist, so they don't get help."

Dr Pichit is adamant that humanitarian assistance should be based on need, and need alone. A person's legal status should not be an issue.

Looming humanitarian crisis

Charities working in Thailand have warned of the risk of water- and insect-borne diseases such as diarrhoea, dengue fever and malaria in the coming days and weeks. Thai officials warned residents in the capital to be vigilant and expect disruptions with electricity and tap water.

"There are places on the outskirts of Bangkok and in other parts of the country which have been flooded for nearly two weeks," Matthew Cochrane, of the International Federation of Red Cross and Red Crescent Societies.

UNICEF said it was providing 20 000 mosquito nets, and handing out 20 000 pamphlets explaining how to stay safe and healthy in flood-hit regions.

The Metropolitan Waterworks Authority said it had reduced the amount of tap water processed for residents from 900 000 to 400 000 cubic metres per day, because of high algae counts at one of its plants.

Officials warned that the country still faced a variety of threats, including strong currents, disease and even crocodile and snake attacks.

A huge part of the country is still under water. ▲



New car technology brings new risks

Motor vehicle rescue – the right training, the right equipment, the right system, the right impact

By Colin Deiner, chief director Disaster Management and Fire Brigade Services, Western Cape Provincial Government

An average of 1 200 people are killed on South Africa's roads every month. Billions are spent annually on road safety awareness programmes. Everywhere we are looking for ways to bring down the death toll. We have pedestrian campaigns; drink driving crackdowns, roadworthy campaigns, children's awareness programmes.

We often neglect the one area where we can save many lives if we do it right. We forget about the 'golden hour' and the part that we, as emergency service managers and vehicle rescue technicians, can play.

The 'golden hour'

It is generally accepted that the concept of the golden hour was first promoted by a military surgeon, Dr R Adams Cowley, who later

became the head of the University of Maryland Shock Trauma Centre, whose website quotes Dr Adams Cowley as saying "there is a golden hour between life and death. If you are critically injured you have less than 60 minutes to survive. You might not die right then; it may be three days or two weeks later - but something has happened in your body that is irreparable."

A more refined version would indicate that the victim's chances of survival are greatest if they receive care within the first hour after suffering severe trauma.

The 'golden hour' concept enjoyed a huge amount of attention in the USA and United Kingdom in the late seventies and early eighties and even spawned a television series of the same name. With the establishment

of paramedic response systems in South Africa in the eighties by some visionary medical specialists in Johannesburg and Cape Town, the concept took hold here and with it developed some of the top trauma response systems in the world.

The optimisation of the 'golden hour' meant that a high level of advanced life support was now being taken to the patient still trapped in his/her vehicle instead of the trauma team having to wait for the patient to arrive at the hospital. The concept is obviously reliant on certain critical factors which relate to the severity of the injuries sustained and the subsequent rate of deterioration of the patient, the distance to the incident and subsequent travel time from the incident to the hospital, and the time taken for the rescue team to respond to the incident ▶



Hydraulic rescue tools used to extricate the patients through the roof of the vehicle

► scene, extricate the patient and present the patient to the medical team for transportation. It is this third factor which we will concentrate on in this article.

The 'platinum twenty minutes'

If we were to start dissecting the 'golden hour', we will find that an awful lot of things have to happen in those first sixty minutes following an accident for role-players to achieve their collective goal: a live patient with a good prognosis. Someone has to detect the accident and report it - this has become quicker and easier nowadays due to the proliferation of cell phones and emergency call taking centres, emergency services need to respond to the scene, secure the scene, access the patient and commence advanced life support. While this is happening the rescue crews have to stabilise the scene by removing and/or securing all prevailing hazards, create an entry path for the paramedic to the victim, stabilise the vehicle and extricate the victim before assisting the medical crew in packaging and removing the released patient and preparing him/her for transportation. All of the above actions take time and it is only through a well-developed and practiced system in which each role player works hard at optimising their specific area of

operations, that the objective can be achieved.

The 'platinum twenty minutes' starts with the arrival of the key players in the rescue team and governs those actions that will guide their activities and specifically the decisions made by the incident commander at this time. These twenty minutes covers the time allocated within the 'golden hour' to the rescue crew for stabilising, accessing and removing the victim from a car wreck and preparing that victim for transport to definitive medical care.

We need to do what we have to do in twenty minutes or less. I'm hoping to share some ideas here on how to achieve that.

The first decision

The first and most critical decision the incident commander will have to make upon arrival will be guided by the condition of the patient and the degree of entrapment and it is vital that the senior medical team member on scene communicates this information clearly and states his/her intentions as to the required actions.

The severity of the accident damage will provide good information on the possible course of action. This

will contain valuable clues as to the mechanism of injury which should be assessed together with the obvious injuries in formulating the decision. It is, of course, true that although these signs are helpful, they will not always provide the full picture. It is therefore vital that at least two team members be tasked to carry out a 360 degree inner and outer survey of the accident scene.

The rescuer doing the inner survey walks around the scene and focus his/her attention on the wreck itself checking for prevailing hazards, vehicle stability, number of patients, degree of entrapment and makes a mental note of the possible course of action that could be taken related to stabilisation of the wreck, glass removal and metal relocation.

The person conducting the outer survey takes a wider route around the wreck and looks for external hazards such as fire risks, hazardous material spillages and tell-tale signs that people might have been ejected from the vehicles involved in the accident or pedestrians that may have been involved.

While this is happening the medical responder should try to make contact with the patient safely and attempt to establish the level of consciousness, degree of injuries and level of entrapment. Modern safety systems and particularly a deployed airbag, could hide certain obvious signs related to a victims injuries and must be considered in all such cases.

The incident commander (IC) should at this time take up a position which provides the maximum advantage in terms of safety, situational awareness and control (I have found that finding a spot near the front of the vehicle is most advantages for this purpose).

This rapid assessment should last no longer than 90 seconds and should culminate in all team members meeting the incident commander and providing feedback on their observations. It is now when the vital first decision is made, and there are four possibilities:

- **Immediate release:**

This takes place when a patient needs immediate advanced resuscitation outside the vehicle and will require a number ►

- ▶ of normal protocols to be disregarded in the interests of "life over limb". This should however never be done at the cost of safety and it is crucial that rescue teams must train often and be well versed in the tactics related to an immediate release in order to do it with the greatest degree of safety.

- **Rapid extrication:**

A rapid extrication will require a rescue team to "step-up" their normal procedures and might require a more hands-on and inward focused approach from the incident commander. Rapid extrications should not take longer than ten minutes and can be made much more effective by the use of certain "non-hydraulic" tools such as reciprocating saws and air chisels to augment the standard hydraulic rescue tools. It is a necessity that rescuers understand the construction of the particular vehicle they are working on as well as the capabilities of the equipment they are working with. I have too often seen a rescue team place all their eggs in one basket by placing a heavy reliance on their hydraulic rescue tools and not having a "plan B" to fall back on when the hydraulics have either failed or got tied up in another task. Rescue crews should train hard at getting just as proficient with hand tools as hydraulics and should work towards a practice of multi-tasking where all these tools can be used in tandem.

- **Controlled release:**

Here we have more time and should focus on protecting the victim's c-spine and obvious injuries while facilitating in-vehicle emergency care. The paramedic will, through keeping the incident commander updated on the status of the patient, guide the course and timing of the rescue operation. A controlled release will afford the rescue team more time to focus on actions such as on-going stabilisation and should produce a stable and well protected patient for transportation to hospital.

- **Prolonged release:**

This will happen in the event



Side wall removal for patient removal

of a person trapped for a prolonged period of time eg heavy motor vehicle or train wreck and will generally require the application of equipment capable of heavier lifting and spreading and higher cutting capacity. It is in these cases where fire services would activate their technical rescue squads. Teamwork is here once again essential, particularly with regard to the patient's injuries and the length of time that he/she has been trapped. Medical management of a deteriorating patient should be the prime consideration here.

One other consideration will be in-vehicle resuscitation. This will happen in situations where the victim needs to be resuscitated while still trapped and where the time taken to extricate him/her could lead to death. The most important task for the rescue team in this case would be to support the paramedics in their efforts by on-going stabilisation of the vehicle and removal of glass and metal that could compromise the safety of the medical crew or the resuscitation efforts.

Teamwork

Although the majority of responses to motor vehicle accidents in South Africa are multi-agency responses, where you can find upwards of two different agencies working on the same scene, it is crucial that an interactive approach be followed

whereby the medical responders must know what to expect from the rescue team and the rescue team must have a realistic knowledge of the capacity and needs of the medical team.

I have often heard the complaint from emergency responders: "we don't work for the same service and this causes confusion at rescue scenes" and it is normally followed by "and we don't have a solution". Well, here's the solution: next time you have a quiet evening on shift, load your crew into your rescue truck, drive down to the ambulance station (maybe pick up some doughnuts on the way) and do a training exercise with the medical guys. While you are at it, why not invite the local private medical service as well (they might pay for the doughnuts!).

The important point is: vehicle extrication is the one primary function which you will be doing often and where you will save the most lives. Everybody involved must get it right. The bleeding, screaming, bloodied victims couldn't care about your "turf".

As in any emergency response, there are an optimal number of people required to conduct a safe and effective rescue. Ever since the start of the 'team approach' to vehicle rescue, which was pioneered by two Florida fire fighters, Steve Kidd and John Cjaskowski, through their 'car busters' series in the early eighties, it ▶



Working in an unstable vehicle wreck has severe safety implications for the rescuers, medics and, most critically, the patient

► has been generally accepted that the optimum rescue team should consist of five members made up of the following positions:

- Incident commander: 'master of the universe' (at least for the duration of the rescue operation)
- Rescue crew (two people)
- Medic
- Medic gopher (gopher this, go for that).

The job of the incident commander is to size up the scene, listen to his/her team members, decide on an action plan and then ensure the perfect harmony for the team to achieve their objectives in relation to his/her plan. As incident commander, you should ensure that no team member is left in any doubt at any time as to what the plan is and what is expected of them. You should be easily accessible, listen to your team and make clear, strong decisions.

The rescue crew is responsible for getting to the victim and getting the patient out of the wreck. This includes a number of tasks of which the following are most important:

- Hazard recognition, control and reduction
- Vehicle stabilisation
- Initial access (for medical crew)
- Primary glass removal (to facilitate initial medical care and "safing" vehicle system such as airbags

- Secondary glass management and metal relocation
- Victim access and removal

The medical team is responsible for accessing the victim and managing him/her for the duration of the rescue operation, transportation to hospital and delivery to the surgical team. Their main activities should be:

- Initial airway and c-spine management
- Oxygen therapy and intubation (if required)
- In-vehicle infusion and drug administration
- Stabilisation of injuries
- In-vehicle patient monitoring
- Patient packaging and removal

All of these activities need to exist side-by-side in perfect harmony. No one task is more important than the other and it is crucial that each team member understands the role his/her fellow team member is playing in ensuring a successful outcome.

Stabilisation – not just for competitions

It has many times been a concern of mine to observe rescue teams competing in extrication challenges, carry out highly elaborate vehicle stabilisation tasks, only to toss all this kit into the store back at the station and then start looking for it again in a year or two when they start their preparation for the next challenge.

Vehicle stabilisation should be the second major activity, after scene safety and should always form part of the incident commanders plans during the initial size up.

The rule is simple. A vehicle is designed to be stable when it is standing on all four its wheels with no major damage. The moment it is no longer on all four its wheels and has suffered structural damage it is unstable.

Working in an unstable vehicle wreck has severe safety implications for the rescuers, medics and, most critically, the patient. I do not intend to go into a lesson on vehicle stabilisation here, save to reiterate the importance thereof. Let's forget about vehicles having lockers full of shoring looking "untidy". Sure, the two-hundred-rand-piece of cribbing might not be as sexy as the half-a-million-rand hydraulic rescue plant but they both have their place alongside each other and should be checked and maintained with the same mind-set.

A final word on stabilisation, remember: stabilisation is an on-going process and doesn't end after the set of vehicle chocks have been placed under the car. The initial stabilisation is intended to provide a safe base for rescuers to work on, climb into, break and cut. Once a major activity has taken place (such a dash relocation or third-door conversion) you need to recheck the stabilisation and ensure that it hasn't moved or been compromised by the preceding activities.

We all need protection

There are four types of protection at vehicle rescue scenes.

1. Protect yourself

A major issue I have when driving past accident scenes or watching news footage, is the number of people working on accident scenes, in the hot zone, without the requisite protective clothing. The regulation white uniform shirt or 'flight suit' is not going to protect you when the pool of leaking petrol you are standing in suddenly decides to spontaneously ignite and ruin your day. It is going to get even worse when you have to explain to the Occupational Health and Safety types why you chose to not provide your staff with adequate protective clothing for ►



Sidewall removal



Side impact



Car on roof

- ▶ the environment in which they are expected to work.

Protective clothing is expensive and also restrictive within the confines of a wrecked vehicle. It is also designed to protect you from heat, chemicals and mechanical injury risks. It is necessary to develop a culture of protecting ourselves at all times. We should not have to be talking about this.

2. Soft protection

Soft protection relates to the kind of protection needed to prevent smaller elements such as broken glass, dust and other small, sharp objects from falling onto the patient and medic. It generally consists of a range of durable blankets and thick vinyl or plastic sheeting. These items are cheap and versatile and should follow the patient and medic around the vehicle from the moment it is initiated until it is no longer needed. The medic gopher should, with experience, identify the ideal positions for this protection and, like stabilisation, continue to monitor and adjust it for effectiveness.

3. Hard protection

Hard protection started off as a spinal board being placed between the victim and a sharp edge in a car wreck and has evolved to a whole range of hardened plastic or wooden panels that fit in various spaces around rescuers and victims to protect them from sharp edges or cutting and crushing rescue tools. Here again is a simple solution limited only by the imagination of your dedicated rescuers. Simple rule: always have hard protection between the tool and the human. Let your imagination design the solution.

4. Protect the patient coming out.

A seriously injured patient will no doubt exit a vehicle wreck with a lot more "accessories" than he/she

entered it. This includes an oxygen mask; intravenous (IV) lines and whatever other delights the world of medical science have come up with over the last few years. On top of that, certain splints and immobilisation devices would have made the patient more difficult to move out of his position than a well-known, recent, international rugby captain. We must focus on "making the hole" big enough to ensure the safe removal of the patient with all these life supporting and stabilising accessories. This might entail additional cutting and metal relocation after the victim has been freed.

New car technology – new risks

All the attention given to new car technology is definitely not without its merits. The most important development around new car technology in recent years is the fact that the lifesaving systems designed to keep people safe, have also succeeded in making it difficult for rescuers to get in. Lt Gregory Vogel, a vehicle extrication instructor from Pittsburgh, Pennsylvania probably sums it up best by saying "The way new cars are designed, they crush around the patient so we can't get them open. ... It saves your life, but now nothing works."

The introduction of crumple zones in the front of cars which are designed to absorb the energy of a crash, has at the same time, taken away a lot of the rigidity of certain points normally used as hard surfaces for the introduction of rescue tool tips and bases. The degree of deterioration of these zones during a high impact collision, in most cases, severely compromises the integrity of natural access points (such as doors) and the practice of merely 'rolling' the lock of the door, can no longer be achieved as before.

Additional structural improvements such as strengthened roof pillar reinforcing, has changed the design of hydraulic cutters to the extent that certain rescue tools manufactured more than ten years ago, are no longer capable of making an impact in this area.

The advent of hybrid cars has an added safety consideration for incident commanders. Granted, they are designed with a high degree of safety. The problem comes when the car is lying on its side in a pool of water.

Add to this all the technology surrounding SRS protection. Vehicle airbags in every conceivable position (now, cutting into a B-pillar which has an undeployed airbag should create the kind of surprise that could get you starring in a YouTube video clip into immortality). Seatbelt pre-tensioners will provide sudden release movements when you don't expect it and severely injure both rescuer and patient.

The answer to the challenge faced by new car technology is simple - knowledge. We have a responsibility to our rescuers to ensure they are able to carry out a dangerous job as safely as possible. Collectively we should work together in researching all the risks they might be faced with and find way of helping them deal with it.

In closing

I am hoping that in this article I have provided some food for thought. Maybe for some older rescuers this has been a good trip down memory lane when we used to 'kick butt' in rescue competitions and on the road.

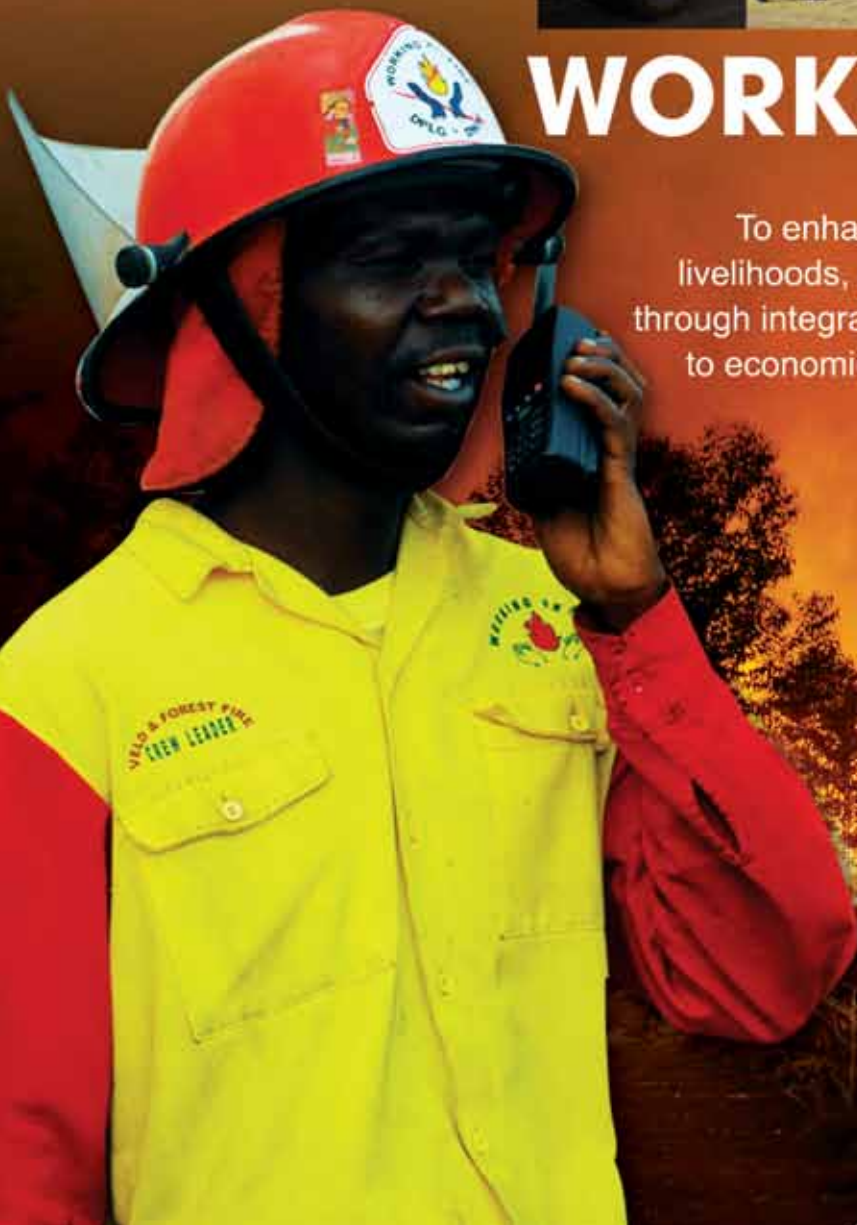
My only wish is that we once again evaluate the reason we are here as rescue services and start to think operationally. That is all our patients want us to do. ▲



WORKING ON FIRE

SCHOLARSHIP FUND

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



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

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

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

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

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

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

For further information, please contact:

The Executive Chairman,
FFA Operations T/A WORKING ON FIRE,
Email: Abrahams@iafrica.com
Tel: +27 (0) 82 557 5069.

Also see the WOF website at www.workingonfire.org

Or deposit your donation in the following Bank Account:

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



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Rural fire coordination centre for Southern Africa

Prepared by Alex Held, WoF International/Europe with support of the Canadian Interagency Forest Fire Centre (CIFFC)

A new Rural Fire Coordination Centre (RFCC) has been set up in Pretoria, South Africa, which will eventually serve the SADC region as a centre of excellence in fire detection, management and ultimately a one-stop-shop for all fire related issues, from equipment to training to policy advice.

The initiative is the combined brainchild of several organisations which includes Working on Fire (WoF) South Africa and Europe, CSIR with AFIS and the regional wildland fire networks, SAFNET and AfriFireNet. The centre also has the support of the German Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Pau Costa Foundation for fire ecology and management.

The coordination centre is located at the South African Council of Scientific and Industrial Research's (CSIR) offices in Pretoria with a direct connection to the latest satellite fire detection and monitoring technology.

WoF will staff the centre while SAFNET, AfriFireNet and CSIR will deliver the services and supervise the process. A spotter plane and a full incident command (IC) team will be available to assist countries as far north as the equator.

The RFCC's mission will be to provide timely, effective and efficient fire information and support to member countries and agencies to enhance national wildland fire preparedness and response capability, and to foster a culture of continuous improvement of wildland

fire management programs and policies by facilitating inter-agency and international cooperation.

The mandate of RFCC will be to provide operational vegetation fire management services to member agencies, countries and organisations that will, by agreement, gather, analyse and disseminate fire management information to ensure a cost effective sharing of resources; and actively promote, develop, refine, standardise and provide services to members that will improve vegetation fire management in Africa. Member agencies include national stakeholders that are mandated to deal with fire management within their jurisdictional boundaries.

The role of the RFCC will include 24-7 operation during the wildland ►

► fire season. The RFCC managers will assume the roles of RFCC duty officers on a rotational basis. Their primary functions as duty officers will be to serve as a resource broker to the RFCC member agencies and to ensure the daily compilation and dissemination of regional fire information. The RFCC duty officers will also provide expertise in the primary areas of resource exchanges (personnel, aircraft and equipment) and as an information or support mechanism to the member countries and agencies and will act as spokesperson providing a national and regional perspective to the media; particularly when resources are being shared to address escalated situations with much public attention.

Working groups and communities of practice

RFCC will administer four working groups and four communities of practice that will be established to address specific tasks of regional fire management concern. The working groups will be chaired by a representative from the RFCC.

The working groups will be comprised of representatives from provincial and national fire management agencies and suitable qualified individuals. Participation in the working groups will be limited to agencies and individuals that are members of the Global Wildland Fire Network (GWFN). Communities of practice are not chaired by RFCC but on a provincial/national level and participation in a community of practice are not limited to RFCC members.

The working groups and the communities of practice will report through the individual chairs to the director of the RFCC who in turn reports to the SADC secretariat.

Resource Management Working Group (RMWG)

The mission of the RMWG will be to ensure that the international exchange standards, business practices and processes are developed and maintained in order to provide for safe, effective and efficient, wildland fire management resource sharing.

Aviation Working Group (AWG)

The mission of the AWG will be to promote the safe, effective and efficient use of aircraft in association

with national and international fire management agencies and other RFCC working groups.

Fire Equipment Working Group (FEWG)

The mission of the FEWG will be to promote, coordinate and disseminate national and international research and development of forest fire equipment and related products. The FEWG will also look at mechanisms to improve logistics and the development of international and national processes for equipment inventory, storage, maintenance, recycling and transport nationally.

Training Working Group (TWG)

The mission of the TWG will be to identify, develop and assess international and national training standards for personnel exchange and support the fire management curriculum in educational institutes. Capacity building in fire management will form the main focus of the TWG.

Fire Science and Technology Community of Practice (FSTCoP)

The mission of the FSTCoP will be to foster the sharing and exchange of fire science and technology development information to support the use of best practices in fire management. It will also provide a forum for interested parties to establish cooperative research and development projects, with the objective of finding solutions to common problems. The FSTCoP will furthermore provide fire science and technology leadership by establishing international and national research priorities and fostering work on those priorities as resources allow.

Forest Fire Meteorological Community of Practice (FFMCoP)

The mission of the FFMCoP will be to advise and consult with RFCC members on operational forest and fire meteorological issues. This working group will also promote, coordinate and support effective operational forest and fire meteorology activities between RFCC members and relevant external agencies in Africa and internationally.

Geospatial Community of Practice (GCoP)

The GCoP's objectives will be to meet on a regular basis to share and exchange fire management geospatial knowledge through

discussions and demonstrations of geospatial tools and applications, developing best practices, guidelines and standards to common data information while fostering good working relationships between partner agencies, in the spirit of RFCC goals and objectives.

Prevention Community of Practice (PCoP)

The PCoP's objectives will be to look at inventory best practices, fuel management, landscape planning, national FireWise options, fire investigation, compliance and enforcement and prevention communication and education.

Each working group and community of practice will have an established vision, mission, goals and membership. Member agencies will decide on the issues they want to have addressed. The council of directors will establish the priorities and the director of RFCC will assign the work to the appropriate working group/community of practice.

The working groups and communities of practice will be expected to respond accordingly within an appropriate period of time. The RFCC will be responsible for ensuring that the tasks are completed as planned and that the expected results are delivered.

The coordination centre based in Pretoria will carry out the daily operations of the RFCC, providing operational services to the RFCC member countries and agencies during the fire season. One of the key components of the daily information sharing is the Wildland Fire Situation Report (SitRep) which will be available daily during the fire season on the RFCC's web site. The SitRep will also identify daily availability of resources for national export, priority wildland fires, possible resource requirements, mobilisation and demobilisation of resources, statistical information and other relevant information. The daily Fire Weather Index (FWI), Fire Danger Index (FDI) as well as forecasted FWI and FDI and related information, guidelines and operating procedures for prevention and suppression will be provided daily to member countries and agencies.▲



Everyone goes home

Fire fighter life safety initiatives program

Know the signs of a coming flashover

By Lenny Naidoo, chief fire officer, Rural Metro Emergency Management Services, South Africa

There is nothing more tragic than fire fighters losing their lives when such loss of life could have been avoided.

South Africa had a horrible year in 2007 when 11 fire fighters were killed in the line of duty. A great percentage of fire fighters lost their lives whilst responding to calls. Sadly, many of the deaths could have been prevented.

The fact that we do not lose as many fire fighters in comparison to the United States (US), gives us a false sense of where we are with respect to our standards. It is more 'luck' on our side that keeps the number of fatalities amongst fire fighters fairly low. The US will obviously have many more fatalities due to the frequency of fires, the predominant use of gas as a power supply, the use of wood for construction, large numbers of high rise buildings and extreme weather conditions.

The US has initiated the 'Everyone Goes Home' fire fighter life safety initiatives program to stop unsafe acts during fire department operations. The program also strives to ensure responsibility to maintain operational safety.

Key to the success of the program is the stressing of the fact that it is everyone's responsibility to have the courage to be safe and ensure that EVERYONE GOES HOME. It takes more than just fire officers or the leadership to ensure safety; it takes every member looking out not only for themselves but for other members of the team.

The 'Everyone Goes Home' program uses fire service experts that are termed 'advocates' to represent for example a province in all matters pertaining to fire fighters life safety initiatives.

Networking and newsletters go a long way to prevent recurrences of

mishaps in the fire service. There are lots of positives that can come off when best practices of fire services are shared amongst the fire fighting fraternity.

Safety and training go together and at present training is a 'nice to have' due to various setbacks amongst the fire services in our country.

Safe fire fighting procedures are passed along from veteran to rookie fire fighter by setting an example at fires and by conversation and explanation at the fire station.

As fire fighters, we are the custodians of safety, however, safe techniques are taken for granted.

Vincent Dunn of the fire department in New York (FDNY) listed 60 fire fighting survival tips for the most dangerous fire fighting operations. Here are some of the ways to stay alive that are applicable to our situation in South Africa.▶

Scotty introduces Bravo backpack

The Scotty 4002B Backpack is designed to be a simple, portable reservoir for water and/or foam concentrate (Class A or Class B).

It provides the wearer with a safe and comfortable way to carry liquids used during fire operations. The 4002B system consists of an outer shell with a removable inner bladder. The outer shell is made in a high-visibility yellow, ballistic nylon fabric and is extremely durable and UV resistant. The Bravo comes with a comfortable, shoulder

harness system. It uses high strength nylon webbing for the fully adjustable shoulder, sternum and waist straps. The high-visibility yellow colour allows the Scotty Backpack to stand out through smoke and foliage.

Each backpack has a 10 centimetre wide filler port with lid and a standard 1,9 centimetre garden hose thread for an outlet. Its maximum capacity is 22 litres.

Rural Fire Rescue is the sole suppliers of Scotty equipment in South Africa.



The Bravo backpack sprayer

- ▶ 1. When stretching a hose line to an upper floor of a building, do not pass a floor on fire unless a charged hose line is in place.
2. Notify your officer when going above a fire to search for victims.
3. If you enter a smoke filled room above a fire and suspect flashover conditions behind you, locate a second exit or window leading to fire escape or portable ladder before initiating the search.
4. Crouch down and keep one leg outstretched in front of you when advancing an attack with a hose line in a smoke filled room. Proceed slowly, supporting your body weight with your rear leg. Your outstretched leg will feel any hole or opening in the floor in your path of advance.
5. Self-contained breathing apparatus (SCBA) must be worn before entering a cellar of a burning building, even if there is a light haze of smoke. Carbon monoxide, a deadly, gaseous by-product of combustion, is colourless, odourless and explosive and quickly builds up in unventilated low areas.
6. At any collapse, stretch a hose line and charge it to protect possible victims and rescuers from sudden explosions and fire.
7. A fire fighter entering a room from a ladder should first place any tools inside the window on the floor before entering. Then, with both hands free, he/she should grab onto a portion of the window and test its stability. If it does not move, the fire fighter maintains his/her grip on the window while moving through it from the ladder.
8. When necessary a fire fighter climbing an aerial ladder should use a ladder belt to secure himself to the rungs. A leg lock will not help if a victim jumps out a window and down the ladder.
9. Fire fighters should never be up on an aerial ladder while it is being raised, rotated or extended. The ladder must be in position before climbing: that means making sure the ladder locks are set too.
10. Whenever there is a danger of wall collapse, an officer in command must establish a collapse danger zone. A collapse danger zone should be equal to the height of the unstable wall. All fire fighters should be withdrawn away from the building to a distance at least equal to the height of the wall.
11. The officer establishing the collapse danger zone must take into account not only how far outward the wall may collapse but also the horizontal span of possible wall collapse.
12. The fire fighters best protection against injury and death by a fall during overhauling is a properly charged flashlight. No fire fighter should respond to a fire without a personal light.
13. Fire fighters should not walk on a peaked roof with a slope greater than a 30 degree angle from the horizontal. There should be a roof ladder in place.
14. Fire fighters should know the warning signs of flashover. When smoke and superheated gases force you to crouch down below half the height of the room, there's danger of flashover. Rollover is also a sign of possible flashover. Rollover is when flashes of flame mixed with smoke, are seen at the upper part of a burning room or at the top of a door or window flowing out of the opening. When you suspect flashover withdraw to safety.
15. Before responding out of the station, check behind you to ensure fire fighters are safely in the vehicle. Drive the vehicle with due consideration for the lives that are on the appliance, the public, vehicles and the weather conditions.

We, in South Africa, should mirror the program that the United States has used with great success. There is not much cost attached to a program of this nature.

Unquestionably there is no price that can be attached to the life of a fire fighter. Let us not lose another fire fighter due to negligence. ▲



Photograph: Action Image

MAN Truck and Bus exhibited a fire and rescue vehicle conversion by Rosenbauer

Johannesburg International Motor Show (JIMS)

This 11-day exhibition was recently held at the Nasrec expo centre, Johannesburg, South Africa.

Virtually all visitors to the Johannesburg International Motor Show (JIMS), agreed that it was a world class event according to the results of research issued recently by the show organisers, SA Show Services.

"We are impressed and delighted at this response," commented Nico Vermeulen the director of the National Automobile Association of SA (NAAMSA), which is a co-owner of the event with Expo Centre.

"Not only were all aspects of the show of a very high standard, but the composition of the 228 102 people who came to Expo Centre over the 11-day show period was close to our ideal target market in terms of demographics. We are also satisfied with the number of visitors, particularly as many other major events took place over the show period, not least of which was the World Cup rugby."

Various commercial vehicle manufacturers exhibited including TATA, FAW, UD Trucks, MAN Truck and Bus, Scania, Hino, Foton, Isuzu Trucks, DAF, Powerstar, Freightliner, Western Star, Mercedes Benz Commercial Vehicles, Peugeot, Hyundai, DongFeng, Navistar International Trucks, Volkswagen and Mitsubishi Fuso amongst others.

Several commercial vehicle bodybuilders, trailer manufacturers, bus and coach builders and motor trimmers also displayed their systems and engineering including Angelo Kater Motor Trimmers, GRW Engineering, TFM Holdings, Top Trailers, Serco Industries, Pahltech and Irizar.

FRI's representative photographer, Simon du Plessis of Action Image, captured some interesting images of fire and rescue trucks as well as mobile clinics and EMS vehicles. ►

Photograph: Action Image



The Angelo Kater Mobile Concepts' EMS vehicle built on a Citroen chassis

Photograph: Action Image



The inside of the Angelo Kater Mobile Concepts' EMS vehicle

Photograph: Action Image



Angelo Kater Mobile Concepts also exhibited a mobile clinic built on a Mercedes Benz chassis

Photograph: Action Image



The inside of the Angelo Kater Mobile Concepts' mobile clinic

Photograph: Action Image



Mercedes Benz exhibited its 6-cylinder Econic 1828LS35 truck tractor that boasts a compressed natural gas (CNG) drive system

Photograph: Action Image



DAF exhibited its XF10M truck tractor

Photograph: Action Image



The imported Scania R999 1 000hp vehicle was dubbed the 'Scania Showstopper'

Our poem this month was written by Rodney Trenam of the Fire and Emergency Services in Pietermaritzburg, KwaZulu-Natal, South Africa.

"This is a poem I wrote after attending to a taxi accident on 30th September 2011 in Copesville, Pietermaritzburg, South Africa, where 15 people died while the driver escaped with merely a scratch.

Please will you consider publishing it as I believe it captures the human element and could have a significant impact on all those who have something to do with transportation.

As now is the World Day of Remembrance for the victims of road crashes, I think it is a particularly appropriate time."

Kind regards,
Rodney Trenam

15 blues and a scratch

The victims of death in silence lie
not a breath nor a moan nor a sigh

off to work and school they went, some not saying goodbye
not knowing today's the day they'd die

they ran the tarmac's gauntlet, the crazy taxi man's outlet
dodging here, cutting there
come, pay up your fare

one chance too many and place to go not any
that rabid impatience the end of many

the carnage, the glass, the metal, the diesel
each so much living and laughing and loving to do still

but the victims of death in silence lie
not a breath
nor a moan
nor a sigh

Written by Rodney Trenam
Msunduzi , Fire and Emergency Services
Pietermaritzburg, KwaZulu-Natal
South Africa



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