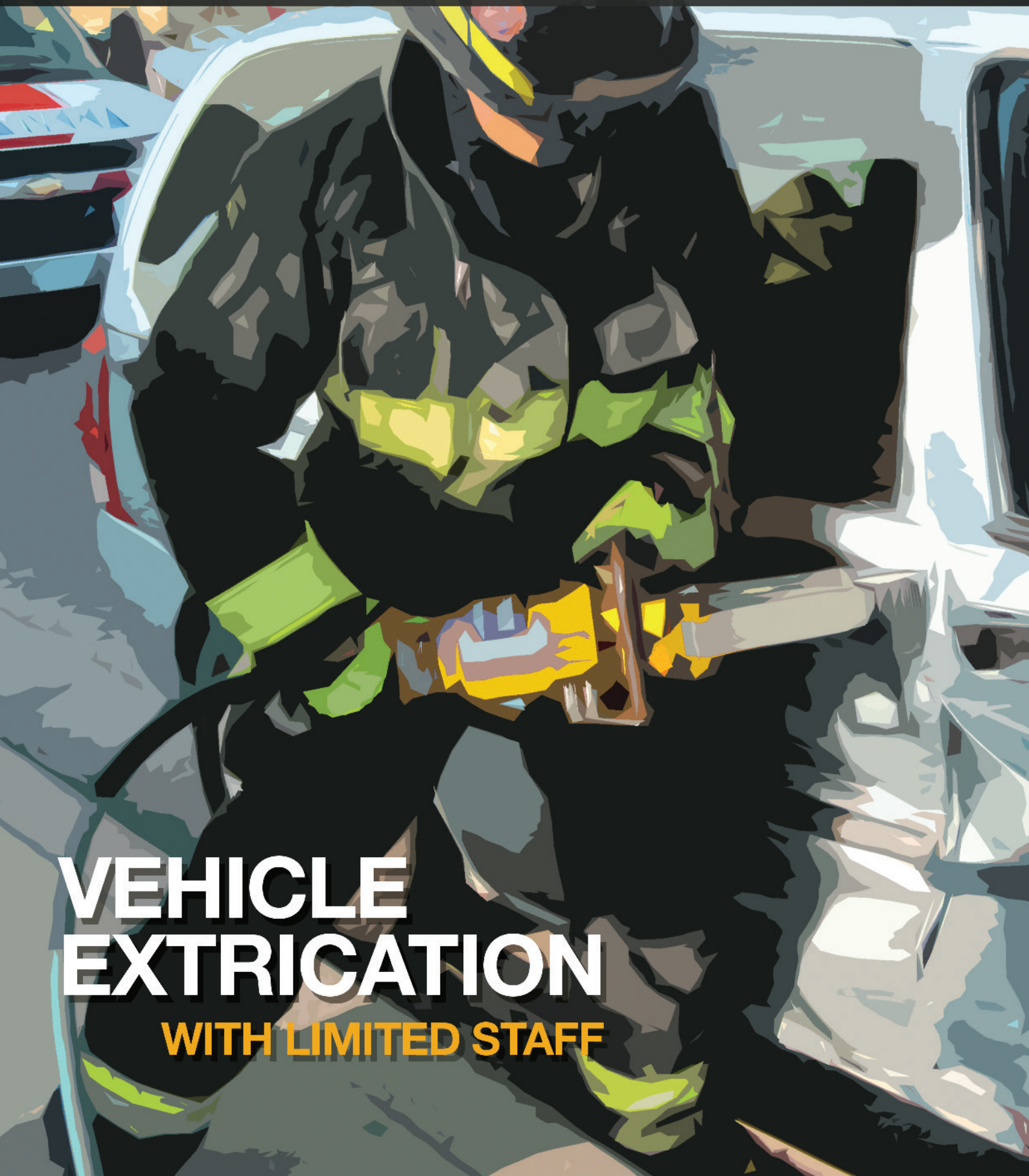
FIRE AND RESCUE INTERNATIONAL

Integrated fire, rescue, EMS and incident command technology

Volume 4 No 6



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WITH LIMITED STAFF

29 Oct - 3 Nov 2017

Expo Centre NASREC, Johannesburg

CLIMATE CHANGE AND THE EMERGENCY SERVICES

The 31st SAESI Conference, Exhibition, Training Events and Challenges

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- Emergency medical rescue
- Incident command system
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Save the date!

Conference programme, exhibition layout and details on the training events and challenges will be released shortly

For more information contact the organiser
Lee Raath-Brownie at **Fire and Rescue International**
Tel: 011 452 3135 **Cell:** 082 371 0190 **Email:** lee@fireandrescue.co

Organiser
FIRE AND RESCUE INTERNATIONAL

FIRE AND RESCUE INTERNATIONAL

Official magazine of South African Emergency Services Insitute (SAESI) Volume 4 No 6

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Lee Raath-Brownie

Fire and Rescue International (FRI) proudly presents its 42nd edition. Enjoy the read!

SAESI News
SAESI president, Dino Padayachee, presents the presidential comment, Salomé van der Berg provides an update on the SAESI examinations while Tinus Pretorius affords an informative overview of the National Diploma in Fire Technology.

Branch news includes the recent cycle event held in Cape Town and assistance provided to St John's Day Care in Mossel Bay.

SAESI 2017 Conference, Expo and Training Events
Last change to register for the upcoming SAESI 2017 Conference, Expo and Training Events! Delegate registrations are available online. Book your seat or exhibition stand now! Teams can also register online for the training events and challenges. Visit www.saesi2017.com for more details.

International Fire Fighter's Day 2017
We review the commemorations in honour of International Fire Fighter's Day 2017.

People
eThekwini Fire and Emergency Services' new chief fire officer, Enock Mchunu, is in the spotlight this month.

The Toughest Fire Fighter Alive Germany
We bring you the results and a photo gallery of the Toughest Fire Fighter Alive held in Germany. And eThekwini Fire and Rescue's Simangele Mbanjwa brought home gold for South Africa, winning the ladies event. Congratulations!

Vehicle extrication
In this regular column, Colin Deiner looks at vehicle extrication with limited staffing levels. Deiner explores aspects on planning, training, incident command and the rescue.

Fire service profile
We visited Sol Plaatje Emergency Services in Kimberley and provide readers with insight into the history, risk profile, operations, equipment, staff and challenges faced by this Northern Cape brigade. We also profile CFO Tinus Pretorius and share his career history, management style and vision.

Trench rescue case study
Travis Trower of Durban University of Technology shares a case study on a different approach applied during a trench rescue at Kloof in KwaZulu-Natal.

Rescue roundup
Julius Fleischman and Neville van Rensburg writes about heavy vehicle extrications, unpacking extrication considerations on the various vehicle classifications.

High angle technical rope rescue
City of Cape Town's Charles Royine provides insight into the development of high angle technical rope rescue to international standards.

Thank you to all our contributors for their continued support! Fire and Rescue International is your magazine. Read it, use it and share it!

Lee Raath-Brownie
Publisher

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This month's FRI Images winner!

Congratulations to

Ian Otto for his photograph 'Family'.

Well done!

Ian Otto wins this month's prize money of R2 000!

Photo description:
The photo is of Ian Otto, Adri and their baby, Dian Otto.

Best rescue, fire or EMS photo wins R2 000!

WIN R2 000 every month!

Fire and Rescue International's (FRI) monthly photographic competition is open to all its readers and offers youthe opportunity of submitting your digital images of fires, fire fighters, disasters, incidents, emergencies and rescues.

Rules

- All photographs submitted must be high resolution (minimum 1meg) in jpeg format
- 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

Entries must include:

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

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

>> ENTER NOW!

SAESI President's comment


Dino Padayachee

We are almost half way through 2017 and the SAESI board, head office, EXCO and working groups have been working non-stop to achieve the objects set out this year.

One of the objectives set in 2015 when SAESI transpired into a non-profit company was to have independent directors on the board by 2017. We are pleased to report that this objective has been achieved and we would like to announce the board members:

SAESI board of directors

Chairperson: Dino Padayachee

Dino Padayachee is the CEO and chairman of the board of directors of Langamed. He holds a Higher Diploma in Fire Technology and a National Diploma in Safety Management. MDP (UNISA). Padayachee is a Graduate in Fire Engineering (IFE). He joined SAESI in 1986 and is currently a Fellow Member of Institute in good standing. Padayachee has 31 years' experience in the fire and emergency services fraternity

Vice chairperson: Melvin Ramlall

Melvin Ramlall is a divisional commander at eThekwini Metro Fire and Emergency Services. And holds the SAESI Associate Diploma in Fire Technology and a National Diploma in Training registered with the (SAIM). He joined the SAESI in 1989 and is currently a Fellow Member of Institute in good standing.

Honorary treasurer: Riaan Janse van Vuuren

Riaan Janse van Vuuren is the manager of emergency services at Sol Plaatje Local Municipality. Janse van Vuuren has an Associate Diploma in Fire Technology, Bachelors in Ministry, Certificate Project Manager, Certificate Disaster Planning, Certificate Hazard Identification and Risk Assessment and Certificate Emergency Services Chaplain.

Independent director: Dr Elias Sithole

Dr Elias Sithole is the head of the Gauteng Provincial Disaster Management Centre, Gauteng Provincial Government. Dr Sithole holds several military courses certificates, disaster management, local government and fire services. He graduated with a Postgraduate Diploma on Land Management and Informal Settlement Regularisation from Erasmus University, Rotterdam, Netherlands.

Independent director: Ben Johnson

Ben Johnson is the CEO of ER24. He has more than 10 year experience in operational, financial, labour/human relations, sales and marketing, business intelligence and analysis, logistics, quality assurance. He is the chairperson of the Audit and Risk Subcommittee of the SAESI board.

Independent director: Tshepo Makola

Tshepo Makola is the executive head at City of Johannesburg EMS and operational director. Makola has a National Certificate Fire Technology, National Higher Certificate Fire Technology, National Diploma Fire Technology, B-Tech Fire Technology, Diploma In Advanced Business Management and a Masters In Business Administration. He is the chairperson of the Nominations Subcommittee of the SAESI board,

Executive director: Salomé van den Berg

Salomé van den Berg is the CEO of SAESI. Van den Berg graduated in Journalism and Public Relations and has a Post Grad in Industrial Phycology.

Co-opted member: Arlene Wehr

Arlene Wehr is a divisional commander at City of Cape Town Fire and Rescue Service. She has a Higher Diploma in Fire Technology, Diploma in Fire Technology, Higher Certificate in Fire Technology, Certificate in Fire Technology, Basic Ambulance Assistance, Fire Investigation and Supervision II.

As part of the objective of SAESI to be a professional organisation and to be recognised as such beyond our own vision and mission statement, SAESI has embarked on registering the institute as a Professional Body with the South African Qualifications Authority and have entered into the process in 2015.

The registration as a Professional Body will not only give the necessary legislative authority but will afford the realisation of establishing a recognised Body of Fire Fighter Professionals with the alignment and protection of their qualifications and careers.

That being said, SAESI cannot be both 'competitor and adjudicator' and have therefore decided to pursue the role of adjudicator in ensuring the career path and standard or the fire fighter is protected through professionalisation and legislation legitimacy.

This means that SAESI can no longer continue providing Fire Technology examinations and as such have embarked on a phasing out programme starting with the next semester from July 2017 to be concluded by October 2018.

There will be four examinations namely in October 2017, March 2018, July 2018 and a final exam in October 2018.

The programme will afford current members that have written subjects on any of the three levels of Fire Technology namely Higher Certificate, Diploma or Higher Diploma to complete their studies for that specific level by the end of 2018. Students will further be allowed to write all four subjects in a sitting if they qualify.

The final intake of new students for any level will, however, only be for the October 2017 sitting, where after the candidates that are in the system will be afforded the opportunity to complete their level by October 2018.

We kindly appeal to all our members to support us in this process.

Dino Padayachee, president, SAESI

The phasing out of SAESI examinations

By Salomé van der Berg

The following programme has been approved for the phasing out of the SAESI examinations and should be communicated to all members of SAESI. There will only be four more examinations:

October 2017	Monday, 2 Oct '17 Fire engineering science (FES)	Tuesday, 3 Oct '17 Fire technology (FIT)	Thursday, 5 Oct '17 Management (MNG)	Friday, 6 Oct '17 Fire safety (FST)
March 2018	Monday, 12 March 2018 FIT	Tuesday, 13 March 2018 FES	Thursday, 15 March 2018 FST	Friday, 16 March 2018 MNG
July 2018	Monday, 16 July 2018 FES	Tuesday, 17 July 2018 FIT	Thursday, 19 July 2018 MNG	Friday, 20 July 2018 FST
October 2018	Monday, 29 Oct 2018 FIT	Tuesday, 30 Oct 2018 FES	Thursday, 1 Nov 2018 FST	Friday, 2 Nov 2018 MNG

There will only be one closing date per examination and no second/late registration closing date for students. Submission of documentation/administration only (no applications allowed/payments during this period) by branches to head office by no later or after the following dates:

October 2017
Closing date for applications: Friday, 11 August 2017
Closing date for submission of documentation to head office by branch only: 18 August 2017

March 2018
Closing date for applications: Friday, 2 February 2018
Closing date for submission of documentation to head office by branch only: 9 February 2018

July 2018
Closing date for applications: Friday, 8 June 2018
Closing date for submission of documentation to head office by branch only: 15 June 2018

October 2018
Closing date for applications: Friday, 28 September 2018
Closing date for submission of documentation to head office by branch only: 5 October 2018

Please note
1. The examination for October 2017 will be the last examination where new applicants will be accepted for Higher Certificate or Diploma or Higher Diploma. New applicants for Higher Certificate must have proof of Fire Fighter one and two, Hazmat Awareness and Operations plus valid Health Professions Council of South Africa (HPCSA) registration for basic ambulance assistant (BAA) or First Aid Level three attached to the application and proof of payment. No application without said documentation will be accepted.

2. Students will be allowed to enter for all four subjects. The restriction of main subjects per semester ie only FIT and MNG in April and FES and FST in October has fallen away.

3. From January 2018 no new applications for any level will be accepted. The students already in the system will be afforded the opportunity to complete the level during the set examination dates. However, should a candidate complete a level before the final examination he/she will not be able to enter onto the next level.

4. Due to the time line of the extra examinations the above due dates will be strictly adhered to. No exceptions will be allowed to students and branches.

5. Membership in good standing remains a prerequisite to write SAESI examinations. Only applications with proof of payment and supporting fire fighter documentation where applicable submitted by the due dates will be considered as stated under point 1.

6. Students with study assistance must supply proof of payment for said assistance before being allowed to enrol for examinations. No writing on credit.

7. Students not on the register after the closing dates will not be allowed to enter or write the examination. No additional answer books or questioners will be sent to the venues or electronically at all.

8. All examination applications must be sent to info@saesi.com or 086 544 0008. No application sent to any other email address or fax number will be dealt with and will be considered as null and void.

For further information, contact your local SAESI branch chairperson or SAESI head office at Tel: 011 660 5672, email: info@saesi.com or visit the SAESI website: www.saesi.com.

National Diploma in Fire Technology
from TUT through distant learning in 2018

By Tinus Pretorius

The Tshwane University of Technology (TUT) is currently waiting for accreditation from the South African Qualifications Authority (SAQA) and the Council of Higher Education (CHE) in order to present the National Diploma Fire Technology as a distant learning programme. The proposed implementation date of January 2018 is currently not confirmed due to the accreditation process from SAQA and CHE. The TUT planned to allow at least 100 students for the first year.

The TUT will be using the same venues ie Cape Town and Durban as utilised by the Policing Distant Learning Programme. They plan to add one more centre, which might be East London or Port Elizabeth. The TUT has exam centres scattered across the country that will assist all enrolled distant learning students to write exams.

Admission requirements for applicants who obtained a senior certificate before 2008:

- A Senior Certificate or an equivalent qualification with an E symbol at the Standard Grade for Mathematics and Physical Science and a D symbol at the Standard Grade for English or an E symbol at the Higher Grade. Prospective students must be employed by an approved fire or emergency service.
- A number of applicants not employed by the emergency services will also be considered, subject to the availability of training space at the Tshwane Metropolitan. These applicants will be required to pass the physical and medical fitness tests prescribed by the emergency services.
- Applicants without Mathematics and Physical Science will be selected for admission based on the successful completion of a potential assessment and a science skills knowledge test.

Admission requirements for applicants who obtained a senior certificate after 2008:

- A National Senior Certificate with a bachelor's degree or a diploma endorsement or an equivalent qualification, with an achievement level of at least 3 for English (home language or first additional language) and 3 for Mathematics or 4 for Mathematical Literacy and 3 for Physical Sciences.
- To be considered for this qualification, applicants must have an Admission Points Score (APS) of at least 18 (with Mathematics) or 19 (with Mathematical Literacy).
- Applicants who are employed by an approved fire or emergency service will be considered for admission to the National Diploma, provided that they meet the minimum APS requirements.
- A number of applicants not employed by the emergency services will also be considered, subject to the availability of training space at the Tshwane Metropolitan. These applicants will be invited for an interview with a departmental selection panel and will be required to pass the physical and medical fitness tests prescribed by the emergency services, provided that they meet the minimum APS requirements.

The Recognition of Prior Learning route will be opened to candidates who do not meet the current minimum admission requirement.

Applicants with a SAESI: Higher Certificate in Fire Technology; Diploma in Fire Technology and or Higher Diploma in Fire Technology may apply to TUT for Recognition of Prior Learning.

Programme format

- TUT has the necessary IT infrastructure to transmit the knowledge content to registered students.
- Study guides as well as learning contents, notes, assignments etc will be sent out by a Distant Learning Unit at TUT.
- TUT plans to have one contact session per semester (two per year) for subjects registered at the two centres.
- The contact sessions will normally take place at the beginning of each semester.
- As part of the practical evaluation during the course the TUT Work Integrated Learning Qualification Logbook which is on the level of Fire Officer 1 and 2 (NFPA 1021 will be issued to each learner and on completion of the tasks to be signed off by his/her supervisor. (a portfolio of evidence needs to be completed and submitted with the completed logbook)

The symbols below explain what the value of 3 as the minimum symbol means:
Code 7 (A Symbol): 80 - 100%
Code 6 (B Symbol): 70 - 79%
Code 5 (C Symbol): 60 - 69%
Code 4 (D Symbol): 50 - 59%
Code 3 (E Symbol): 40 - 49%
Code 2 (F Symbol): 30 - 39%
Code 1 (FF Symbol): 0 - 29%

As more information becomes available we will share it with all members.

FIRST YEAR			
CODE	**SUBJECT**	**CREDIT**	**PREREQUISITE SITE SUBJECTS (S)**
FIRST SEMESTER			
EMR101T	Emergency Management I	(0,143)	
FBH111T	Fire Hydraulics I	(0,143)	
FBO111T	Fire Construction I	(0,143)	
TOTAL CREDITS FOR THE SEMESTER		0,429	
SECOND SEMESTER			
CEM101T	Chemistry: Emergency Services I	(0,143)	
FBT111T	Fire Technology I	(0,143)	
PHV101T	Physics: Emergency Services I	(0,143)	
TOTAL CREDITS FOR THE SEMESTER		0,429	
TOTAL CREDITS FOR THE FIRST YEAR		0,858	

SECOND YEAR			
CODE	**SUBJECT**	**CREDIT**	**PREREQUISITE SITE SUBJECTS (S)**
FIRST SEMESTER			
EXP1FTC	Fire Technology: Practical I (offered in both symesters)	(0,071)*	
FBC211T	Fire Chemistry II	(0,214)*	Chemistry: Emergency Services I
FBO211T	Fire Construction II	(0,143)	Fire Construction I
FBP211T	Fire Physics II	(0,214)*	Physics: Emergency Services I
TOTAL CREDITS FOR THE SEMESTER		0,642	
SECOND SEMESTER			
EMR201T	Emergency Management II	(0,143)	Emergency Management I
EXP2FTC	Fire Technology: Practical II (offered in both symesters)	(0,071)*	Fire Technology: Practical I
FBH211T	Fire Hydraulics II	(0,143)	Fire Hydraulics I Physics: Emergency Services I
FBT211T	Fire Technology II	(0,143)	Fire Technology I Physics: Emergency Services I
TOTAL CREDITS FOR THE SEMESTER		0,500	
TOTAL CREDITS FOR THE SECOND YEAR		1,142	

THIRD YEAR			
CODE	**SUBJECT**	**CREDIT**	**PREREQUISITE SITE SUBJECTS (S)**
FIRST SEMESTER			
FBH311T	Fire Hydraulics III	(0,167)	Fire Hydraulics II Fire Physics II
FBO311T	Fire Construction III	(0,167)	Fire Construction II
FBT311T	Fire Technology III	(0,167)	Fire Technology II Fire Physics II
TOTAL CREDITS FOR THE SEMESTER		0,501	
SECOND SEMESTER			
EMR301T	Emergency Management III	(0,167)	Emergency Management II
FBC311T	Fire Chemistry III	(0,166)	Fire Chemistry II
FBP311T	Fire Physics III	(0,166)	Fire Physics II Fire Hydraulics II
TOTAL CREDITS FOR THE SEMESTER		0,499	
TOTAL CREDITS FOR THE THIRD YEAR		1,000	
TOTAL CREDITS FOR THE QUALIFICATION		3,000	

Successful brigade cycle event held in Cape Town

By Dino Levendall

A successful fire brigade cycle event held on Saturday 1 April 2017 in Cape Town was jointly hosted by City of Cape Town Fire and Rescue, Southern African Emergency Services Institute (SAESI) and the Western Cape Fire Fighters Association (WCFA). The day was a great success and everyone enjoyed the event. There was camaraderie and strong sportsmanship between all riders.

There were a few first-time riders who all loved it and will be doing more of this in the future. The fastest rider finished in 1 hour 6 minutes. Some riders experienced mechanical problems with the last rider fishing in 2 hours and 10 minutes.

I would like to thank all who participated and our sponsors, SAESI, the Western Cape Fire Fighters

SAESI Southern Cape Branch assists St John's Day Care

By Wayne Josias and Nadia Jacobus-Julies

The members of the SAESI Southern Cape Branch went the extra mile to assist the community of Mossel Bay by holding an outreach programme at a disadvantaged pre-school. The event took place a day before the branch meeting, which was held in Mossel Bay.

TThe SAESI Southern Cape Branch members got together on Thursday, 18 May 2017, to make a difference in the lives of 45 children and its principal, Bongiwe Mrawuli, at St John's Day Care in Asla Park situated in Mossel Bay. The day care was identified by social services, as it needed and still needs much help. Members heeded the call from all over our Southern Cape region ie Overberg, Stellenbosch, Breede Valley and Mossel Bay. We prioritised the work to be done due to our limited resources and time and decided to make the structure and surrounds safe. Fire fighters worked tirelessly late into the night to reinforce the roof and waterproof it, replace previous unsafe lights and fittings, refit the fence and replace the gate, repair and repaint the swings and structure and finished off with a general clean-up of the grounds and surrounds.

We returned the next day after our general meeting with gifts for the children and books and toys for the day care. Mrawuli was overwhelmed by the generous hearts of the members and could not thank us enough for all we had done. SAESI Southern Cape also wants to thank Builders@Home, De Bakke Santos Resort, Object Furniture, Mossel Bay Municipality and the respective fire chiefs and members for their support, which made the day a success.

Persons, organisations or companies still wishing to help may contact Nadia Jacobus-Julies on 078 788 4112, as they still need the following:

- Mattresses
- Camping cots
- Toilet hygiene system
- Potties
- Books
- Shelves

Association and City of Cape Town Fire and Rescue Service for their support of the event.

Open winners
1. S Maloy
2. R Okkers
3. J Caresle

Top ladies
1. K Du Plessis
2. C Mcdonald

Top masters
1. B Stahnke
2. W Lourens
3. I Schnetler (chief fire officer)

Participants

The participants included Karen du Plessis, Ian Schnetler (chief fire officer), Jacques le Roux, Francis van der Byl, Bernard Stahnke, Wilhelm la Grange, Gabriel Williams, Ruben Booysen, Michael Gardner, Warren Lourens, Ricardo Okkers, Jermaine Carelse, Chey McDonald, Stanford Maloy, Gershwin Cloete, Theo Loubser and Cyprian Ayslie (senior fire fighter) and Virgil Cloete, Warren Sam, Arlene Wehr, Morne Haskell, Keenan Walters and Ryan Abrahams assisted with the organising of the event.

SAESI Southern Cape Branch assisted a disadvantaged pre-school in Mossel Bay

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Powered by the A TEAM

Dr Mmaphaka Tau

heads up NDMC

Dr Mmaphaka Tau

Dr Mmaphaka Ephraim Tau was appointed as the Deputy Director-General (Head) of the National Disaster Management Centre (NDMC) on 1 January 2017. Dr Tau heads up the NDMC after leaving his position as Deputy Director-General responsible for Forestry and Natural Resources Management in the Department of Agriculture, Forestry and Fisheries.

As head of the NDMC, Dr Tau is entrusted with the responsibility to coordinate implementation of disaster management and fire services in the country and contributing to the global disaster risk reduction agenda.

Background

Dr Tau, who hails from Limpopo, started his career at the former Department of Land Affairs as a planner, then as a principal planner after which he was recruited by the Department of Water and Forestry to manage the forest land administration unit. He has a Bachelor of Arts majoring in Geography and English, which he obtained in 1995, a Higher Education Diploma obtained in 1996 and an Honours Degree in Development Studies, which he obtained in 1997, all from the University of Limpopo. In 2003, Dr Tau obtained a Masters in Development Studies specialising in rural development from the University of South Africa. He then was appointed as assistant director of Land Reform and Relationship Management.

From 2005 until 2008, Dr Tau served as Deputy Director for Veld Fires Oversight and in 2006, he enrolled for his Master's Degree in Disaster Management at the University of the Free State, which he obtained in 2008.

He served as senior manager for Disaster Management Capacity Building and Research at the Department for Provincial and Local Government, now Cooperative Governance and Traditional Affairs (CoGTA), from 2008 until 2014. During 2014, Dr Tau obtained a Philosophiae Doctorate in Development and Management through the North West University on the topic: An institutional model for collaborative disaster risk management in the Southern African Development Community (SADC).

In 2014, he was appointed as chief director responsible for Natural Resource Management at the Department of Agriculture, Fisheries and Forestry (DAFF) and in January 2016 as the deputy director general (DDG) responsible for Forestry and Natural Resources Management in DAFF where he served until 31 December 2016.

Dr Tau took over as head of the NDMC and DDG of CoGTA in January 2017.

He has already presented the outcomes of his research in two international forums ie the Academic Network for Disaster Resilience to Optimise Educational Development (ANDROID) held in Media City in the UK during September 2014 and the second biennial conference of the Southern African Society for Disaster reduction held in Windhoek, Namibia, during October 2014. He has also published an article in the Journal for Disaster Risk Science on his thesis.

His professional involvement includes the following forums:

- A founding member and Advisory Committee Member (ACM) of the Jamba journal for Disaster Studies
- A co-author of the Risk and Development Review (RaDAR) publication
- An Advisory Board Member (ABM) of Stenden South Africa University: Department of Disaster Management
- Founding member of the Southern African Society for Disaster Reduction (SASDiR) and
- A founding team member of the University of Venda (UNIVEN) and Department of Cooperative Governance (DCoG) collaboration on programme development on disaster risk sciences that forms part of the conference.

Vision for disaster management and fire services

FRI Media, publishers of Fire and Rescue International and Disaster Management Journal, met up with Dr Tau and he provided some insight into the way forward, his vision for the NDMC and the immediate plans.

Dr Tau said during the interview, "I am an advocate of sustainable development. It is an honour for me to be associated with this important discipline as I am a firm proponent of disaster risk reduction principles and practices and I fully support observations by the Z Zurich Foundation (1973) that every one Rand spend on risk reduction measures saves five Rands in avoided or reduced disaster losses.

I am also deeply concerned about the prevailing global converse to the disaster reduction mantra, which points out that 87 percent of all disaster-related funding is targeted at relief and recovery. This is a situation that I believe needs to be reversed through improved hazards and risk assessment, monitoring and aggressive roll out of cross sectoral risk reduction measures. I therefore believe that existing pieces of legislation such as the Disaster Management Act 2002 (Act 57 of 2002 as amended), its policy framework of 2005 (the NDMF 2005), sectoral policies and legislation, such as the National Climate Change Response White Paper 2011, should be read and executed within the framework of regional and global strategies and commitments existing in the SADC, African Union and the United nations (UN) eg the Sendai Framework for Disaster Reduction 2015, the Sustainable Development Goals, etc). This therefore makes the case for Ecosystems-Based Disaster Reduction (Eco-DRR) critical with streamlined response capacity and systems, given the magnitude and severity of hazards," said Dr Tau.

He continued, "To this end the country needs to consider adopting a national DRR strategy responding to national, regional and global commitments outlined by the Sendai Framework for disaster risk reduction (DRR) and the sustainable development goals (SDGs)."

"The NDMC's subsidiary vision should fit in properly with the CoGTA vision: 'a functional and developmental local government system that delivers on its constitutional and legislative mandates within a system of cooperative governance'."

"A vision statement for the NDMC would be, "By 2030 service delivery and development will be on the same path with disaster risk management as complementary discourses." This speaks to the long term plans and duties for disaster management and fire services."

"However, work must start now, so that by 2030, we should see the three tiers namely, service delivery, development and disaster risk management, in a report showing them being on the same level. To achieve this, the following five questions need to be addressed:

- What needs to be changed?
- Why should issues be addressed?
- What are the strengths and assets that we have?
- What is our dream end-state (2030 vision)?
- What will success look like?"

Dr Tau elaborated, "I believe that strategic partnerships, resourcing of disaster risk management programmes, local ownership and political buy-in and championship, remain some of the key ingredients of our desired collective success. Therefore the work of the disaster management system will be shoehorned on the Batho Pele ethos notably: 'We care, we belong, we serve,' as we marshal the disaster risk management system towards the National Development Plan (NDP) 2030 aspired eventuality decidedly: '..... now in 2030 we live in a country we have remade'."

"The NDMC and broader CoGTA family and the provincial and municipal custodians of disaster management and fire services, remain my pillars of strength in my pursuit of taking the disaster risk management function to the next higher level in the interest of the communities we serve."

Immediate duties and plans

We asked Dr Tau to detail the immediate duties and plans of the NDMC for disaster management and fire services to which he replied, "I believe that it is time for the leadership in the disaster management and fire services across the spheres of government; to 'move from the dance floor to the balcony where you can continually do corrective action and meet-cause-action', meaning that you fix as you carry on and that this is a key element of adaptive leadership. My wish is to adapt to the new environment, as well as adapting and embracing things that I realise are positive and also be able to adapt/adjust where I deem it necessary. This is a process where one is able to mobilise people to thrive and also be able to rise to the occasion when time comes to deal with challenges. I believe this is the best way to take the best from history while moving into the future."

He added, "The founding philosophy can be stated by using a quote from John Maxwell that, 'Bad decisions come about where people are not held to account early enough' and furthermore referring to Maxwell's book, the Leadership Gold, that 'an intelligent person without passion, will be out-performed by an average person with passion'."

"As the disaster management and fire services fraternity , we are able to define our trajectory, clarify roles and espouse the professionalism principles, it will be easy that we all can hold each other accountable and not in a negative way but correctively so, so that we can remain focused and dedicated to our work to serve our communities. I strongly advocate that we must recognise each other as individual and important resources contributing towards achieving the joint and bigger picture of the work of disaster management and fire services," said Dr Tau.

Medium term plans and duties

Discussing the medium term plans and duties, Dr Tau commented that "The approach that I will devise as head of the NDMC and in consultation with the broader fraternity, will be based on a fit for purpose and situational conscience philosophy applying disaster risk management plans, sector plans, municipal IDPs, the Back-to-Basics strategy and strategic disaster risk reduction projects as key vehicles. I therefore believe that all stakeholders and role players, inclusive of the academic and other civil society formations, will also be pivotal to doing our work."

Fire and Rescue International wish Dr Tau the best with in his new position as head of the NDMC.

SAESI Conference, Expo and Training Events 2017

A large number of people are assisting to make the upcoming 31st SAESI Conference, Expo and Training Events 2017 a success. The event themed, 'Climate change and the emergency services', will be held at the ExpoCentre, NASREC, situated in Johannesburg, South Africa from 29 October to 3 November 2017.

The event is endorsed by the Gauteng Province CoGTA and the National Disaster Management Centre (NDMC).

SAESI 2017 Preliminary programme

Day	Date	Time	Event	Venue
Sunday	29 October 2017	12h30 onwards	Team registrations	SAEC Modderfontein
	29 October 2017	16h00	World record attempt	SAEC Modderfontein
	29 October 2017	17h00	Meet and greet and badge swopping evening	SAEC Modderfontein
Monday	30 October 2017	8h00 to 16h00	SAESI EXCO meeting	Ora Bella Restaurant
	30 October 2017	Various	Training sessions	Various
Tuesday	31 Ocober 2017	8h00 to 16h00	SAESI EXCO meeting	Ora Bella Restaurant
	31 Ocober 2017	Various	Training sessions	Various
Wednesday	01 November 2017	7h00 to 8h20	Conference registration	NASREC: Black Eagle
	01 November 2017	8h30 to 9h00	Official opening	NASREC: Black Eagle
	01 November 2017	9h00 to 16h00	Conference, service awards, exhibition and challenges commence	NASREC: Various
Thursday	02 November 2017	7h30 to 16h00	Conference, exhibition and challenges continues	NASREC: Various
	02 November 2017	18h30 to 23h00	Gala dinner, exhibitor particpation certificates (VIPs, delegates and exhibitors)	NASREC: Milner's Restaurant
Friday	03 November 2017	7h30 to 14h00	Conference, exhibition and challenges continues	NASREC: Various
	03 November 2017	15h00 to 16h30	Closing ceremony, competition results	NASREC: Black Eagle
	03 November 2017	16h30	Teams depart, stand breakup	NASREC Various

Conference and expo

The conference will be held from 1 to 3 November 2017 and will address issues pertaining to climate change and the impact thereof on the emergency services. The impressive speaker line-up includes international and local presentations bolstering insight, research and practical know-how with hands-on discussions providing a great networking forum for debate.

International speaker

Alan Pellowe, 112 Solutions and consultant to the UN will discuss:

- The global problem of climate change affecting the fire profession
- Incident related issues faced within Africa and South Africa
- Early warning systems
- Risk-based fire fighter and rescue training
- Specialised equipment and the funding issues

Draft conference programme

The ever popular SAESI Conference will be on 1 to 3 November 2017, supported by an industry expo. The plenaries offer an ideal opportunity for industry-specific networking and workshops. The topics are relevant and registration starts at 7h00 and the conference starts at 8h00.

Wednesday, 1 November 2017

- New SAESI President's inauguration
- Keynote address: Climate Change effects on the fire profession globally by Alan Pellowe, 112 Solutions, UK
- Minister of CoGTA address
- National Disaster Management Centre (NDMC): Legislation
- SAESI Long Service Awards
- Rosenbauer Service Excellence Award
- Rosenbauer Social Responsibility Awards

THE LARGEST EMERGENCY SERVICES CONFERENCE AND EXHIBITION IN AFRICA

Plenaries: Industry specific sessions

Thursday, 2 November 2017

Wildfire/urban interface
Climate change and the wildfire/urban interface
Legislation
Forest fires and the urban interface in perspective
ICS challenges and the wildfire/urban interface
Pre-season planning
FPA strategies for success and lessons learned
Wildfire awareness toolkit
Knysna fires: a case study and lessons learned
Training to include wildfire/urban interface

Technical rescue
Technical rescue, an international perspective and trends
Equipment and maintenance
Combat search and rescue
Beyond the rubble
Trench rescue
Off road Rescue
High-angle rescue
The rhythm of technical rescue
Swift water rescue

Airport rescue and fire fighting (ARFF)
An overview of risk reduction strategies and the importance of MOUs
Airport categorisation and licences
Search and rescue
Training standards
Design of a new airport
Fleet and equipment maintenance
Latest technology
Drone challenges
Audits
A pilot's perspective

Friday, 3 November 2017

Fire safety, awareness and prevention
Fire safety in South Africa: challenges
Fire safety challenges and strategies for high-jacked buildings
Fixed systems
JHB safety kits
Smoke alarms: Does it pay off?
Fire safety in informal settlements

Industrial fires
Warehouse fires: case studies
Industrial/municipal interface
Fixed systems vs response
Tanks farm fires
Foams
Emerging and future technology
Vessel fires
Statistics: Industrial/wildfires/informal settlements/structural
Water supply and relay
Industrial fires: Training

Emergency medical service
International trends and challenges
Short courses
Medic and scene safety
Medical Command and Control
Dealing with infectious diseases
Burns and treatments
Paediatrics, retrieval and treatment of sick infants
Aeromedical: preparation for flight
New threats to emergency services and PTSD
Health regulations for sport events and mass gatherings

Conference package
3 days R8 125 incl VAT for SAESI members, R8 938 incl VAT for Non-SAESI members
1 day R2 223 incl VAT for SAESI members, R2 445 incl VAT for Non-SAESI members
3 Day attendance includes daily lunch and gala dinner for one
1 Day attendance excludes daily lunch and gala dinner
Gala dinner attendance: SAESI members: R800 incl VAT and Non-SAESI members: R880 incl VAT

Register now!
Register online at www.saesi2017.com

For more information contact
Lee Raath-Brownie at **Fire and Rescue International**
Tel: 011 452 3135 **Cell:** 082 371 0190 **Email:** lee@fireandrescue.co

Organiser
FIRE AND RESCUE INTERNATIONAL

SAESI Conference, Expo and Training Events 2017

Training sessions and challenges

Complementing the conference is a number of industry training sessions and challenges such as vehicle extrication, high-angle rescue, incident command (including a practical exercise), emergency medical rescue (trauma) and a fire fighter and rescue challenge, promoting training amongst peers and upskilling our first responders, while promoting the emergency services and its complexities.

The training events and challenges not only showcase new technology and methodology to save lives but additionally provide hands-on training and practical know-how and expertise to increase the effectiveness of the first responders in the field.

All the training sessions will be on international standard and are championed by the best of the best in the industry. Below follows the training topics to date.

VEHICLE EXTRICATION

- Assessor workshop
- Risk assessment
- Physical and mechanical entrapment
- Vehicle stabilisation, International Trauma Life Support (ITLS) approach
- New vehicle technology
- Hand tools including high-lift jacks

Registration fees
R8 770 per team including VAT
Teams will consist of six members:
One member will be the designated team captain/leader,
One member will be the designated team medic
A team member can only participate in the event upon approval of a principle manager from the organisation they are representing.
Reserve member: R1 465 per person

EMERGENCY MEDICAL RESCUE

- Infection control
- Ventilation
- Spinal management
- Street drugs
- Incident management
- Ethics
- HPCSA Q&A
- Fatal scenes
- Leadership
- Customer service
- Organ donor recognition
- Who's your sister
- Terror incidents
- Blunt trauma
- Burns
- Mechanism air accidents
- Paediatric head injury or cardiac

Registration fees
R6 270 per team including VAT
Teams will consist of three members
There will be two levels:
Intermediate Life Support (At least 1 x ILS member)
Advanced Life Support (At least 1 x ALS member)
Reserve member: R2 090 per person

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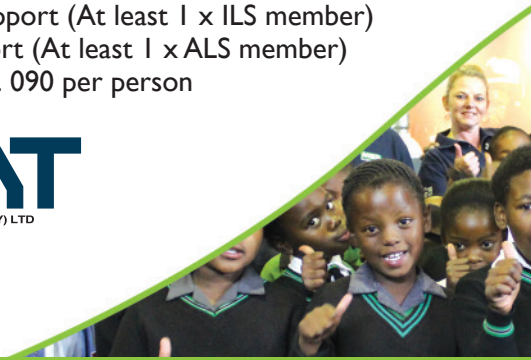

THE LARGEST EMERGENCY SERVICES CONFERENCE AND EXHIBITION IN AFRICA

HEIGHTSAFETY

HIGH-ANGLE RESCUE

Monday, 27 October 2017

- Working at height: fall arrest, travel restrict and work position.
- Back tie anchors; reinforcing the marginal anchors and floating anchors.
- Safe belay systems TWPB vs 540 belay device vs MPD vs Petzl ID D20.
- A uniform national curriculum for Advanced Rope Rescue (High Angle 2).
- Legislation; acts; local and NFPA codes relative to rope rescue in the fire and rescue services.
- SAQA Rigging Unit Standard 229997 and its relevance to urban technical rope rescue.
- Industrial rope access and the fire and rescue service.

Tuesday, 28 October 2017

Practical rescue scenario training sessions.
Spending time fine tuning rescue teams skills in the various high angle challenge scenarios.

Registration fees
R7 520 per team including VAT
Teams will consist of five members:
At least two fully qualified high angle rescue operators and one medically qualified (first level 3)
One team member to be ILS qualified
There will be two categories:
Advanced category (High Angle 2 qualified)
Intermediate category (High Angle 1 qualified)
Reserve member: R1 505 per person

All registration forms are available at www.saesi2017.com

INCIDENT COMMAND SYSTEM (ICS)

Overview of the ICS
I-100 Certification
I-200 Certification
ICS Toolkit and forms
Practical exercise
ICS provides a systematic, proactive approach, is a standardised, on-scene, all hazards incident management system. Although the system encourages standardisation, it is flexibly in organisational structure and expand and contract to meet the incident need.

The need to effectively communicate and manage resources during an incident (regardless of complexity) is of vital importance to any organisation. Someone must be in command and priorities must be established to ensure direction and control in order to avoid conflict and confusion in order to establish order out of chaos.

Registration fees
R2 850 including VAT per person. Includes I100 and I200 certificate.

SAEC FIRE FIGHTER CHALLENGE

The SAEC fire fighter combat challenge is open to individual participation and relay teams.

Registration fees
There are two options to enter:
Individual entry R630 per person including VAT
Team (five members) entry R2 510 per team including VAT
Reserve member: R505 per person

SAEC RESCUE CHALLENGE

Team (four members) R1 210 per team including VAT
Reserve member: R305 per person

For more information contact
Lee Raath-Brownie at **Fire and Rescue International**
Tel: 011 452 3135 **Cell:** 082 371 0190 **Email:** lee@fireandrescue.co

Organiser
FIRE AND RESCUE INTERNATIONAL

Joe Gqabi District Municipality
celebrates International Fire Fighter's Day

Speaker JGDM, Cllr Notyeke


Head of disaster management Joe Gqabi District Municipality Patrick Moko


Chief fire officer Kenneth Pitso


Motor accident rescue simulation

The theme of this year's International Fire Fighters Day is, 'Reducing fire mortalities through community awareness'. The role of public awareness in the prevention and awareness of fires was the order of the day at the Joe Gqabi District Fire Fighter's Day, which was held on 4 May 2017 at Nkosi Sikelela Private School in Aliwal North.

Acting on behalf of the Executive Mayor, Cllr TZ Notyeke applauded Joe Gqabi District Municipality on hosting the first ever International Fire Fighters Day in the province of the Eastern Cape. Notyeke emphasised the urgency of having well equipped and effective fire fighting services established in all four local municipalities of the district.

At present the Joe Gqabi District Municipality is providing all fire fighting services; a function which should lie with the local municipalities. The role of the district is to support in terms of manpower, training and equipment.

The head of disaster management in the district, Patrick Moko, urged the senior secondary pupils present to consider a career in fire fighting and rescue services.

Chief fire officer, Kenneth Pitso added that a fire fighter should show honesty, diligence and respect. He said that the role of a fire fighter is not only to fight fires but also to prevent fires through community awareness.

The need to engage in shared services is becoming a reality through engagement on national, provincial and district level as fire fighting services also include the police emergency medical services and traffic services.

Lloyd Phetlu of National Disaster Management Services and Nicholas ▸

Western Cape Government

DISASTER MANAGEMENT

FIRE RESCUE SERVICES

The Western Cape Disaster Management
Fire and Rescue Services
in partnership with Vulcan Wildfire Management

FIRELINE SAFETY TRAINING

Every wildfire season many responders are critically injured or killed during operations. The Western Cape Government have recognised this preventable risk and contracted Vulcan Wildfire Management to present a Fire-line Safety Training programme for all operational personnel responsible for wildland fire-fighting from the local fire services, Fire Protection Associations, Land Owners and Volunteers.

This annual one day course is aimed at presenting the latest tactics on safe operations related to wildfire risks, behaviour and response. Training is provided in order to recognize and mitigate risk, maintain safe practices, and reduce accidents and near misses. This training must ensure that wildland firefighters have information regarding current initiatives, lesson learned from the past wildfire season and critical issues for the upcoming season.

The 1 day course will be presented in each District of the Western Cape during the period from September to October 2017. Venues and dates for the training will follow soon.

In addition to the training each participant attending the course will receive the new Incident Response and Fire-line Safety Pocket Guide.

Note: Fire-line Safety Training is required for all personnel participating in wild-land fire-fighting and those who may be subject to assignments on the fire-line within the Western Cape Province

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Sol Plaatje Emergency Services commemorates IFFD 2017

The seminar was held in commemoration of IFFD, National Fire Safety Week and National Burn Awareness month

In commemoration of International Fire Fighters' Day (IFFD), National Fire Safety Week and National Burn Awareness month, Sol Plaatje Emergency Services held a seminar addressing topics of interest to the emergency services fraternity in the area. The seminar formed part of the activities of the Municipal Disaster Management Advisory Forum and was well attended with 92 delegates in attendance. Fire and Rescue International also attended the event. Riaan Janse van Vuuren, manager at Sol Plaatje Emergency

- Julius of the Provincial Disaster Management Services explained their role in support to fire services through the development of effective legislature, programmes and funding.

James Sparks of South African National Road Agency (SANRAL) cautioned the scholars present at the event to refrain from wearing earphones when they are using the roads as it block the sound of traffic causing serious accidents or even death. He urged parents and teachers to educate their children on road safety. Road accidents are one of the main causes of fires.

Emergency Care Services explained the different degrees of burns which a person may incur during a fire.

The event came to an end with a demonstration by Working on Fire, Joe Gqabi Fire and Emergency Services, South African Police Service and Emergency Medical Services on fire fighting and motor accident rescue.

JGDM fire fighters

Working on Fire demonstration

CFO Ian Schnetler and Riaan Janse van Vuuren

The Kimberley Hospital burns unit

Services, shared the history of International Fire Fighters' Day and St Florian, the patron saint of fire fighters.

Seminar presentations and discussion topics included an overview of the implementation of the incident command system (ICS) by City of Cape Town's chief fire officer, Ian Schnetler. Schnetler provided some background to ICS, its core workings and the recently developed ICS Toolkit by the South African ICS Working Group. He also shared several case studies where ICS was implemented during recent fires in Cape Town. The South African ICS Working Group can be contacted through the website, www.saics.org.

Dr Vernon Wessels, medical coordinator at ER 24, provided insight into the Major Incident Medical Management and Support (MIMMS) Triage System. Providing some background to the implementation of the MIMMS Triage System, Wessels detailed its practical implementation and suggested future courses on MIMMS.

Dr Tertius Potgieter of the Kimberley Hospital burns unit discussed the emergency treatment of burn wound victims, including chemical burns, on the emergency scene. Potgieter gave insight into the high number of burns treated by the unit and provided hands on advice for the management of burn victims at an incident.

City of Cape Town commemorates

International Fire Fighter's Day

The City of Cape Town Fire and Rescue commemorated International Fire Fighter's Day with all fire stations observing a minute of silence at midday, on 4 May 2017.

In addition, a special 'Thank you' event was held by the Friends of the Red Cross Children's Hospital that handed over a certificate to the fire and rescue service. The hospital thanked the City of Cape Town Fire and Rescue Service for their continued support throughout the past few years by assisting with the fundraising events and the annual donation to the burns unit. Each year the fire fighters host a fire fighter's ball and all proceeds from the event are then donated to the hospital. The Friends Trust felt it prudent to use the special day that all fire fighters revere, to say thank you. This took the form of a small drill at the front of the hospital, with a few parents and children present. Then the certificates were handed over to the fire fighters.

The Sol Plaatje Emergency Services also hosted a programme promoting fire safety to the local schools during National Fire Safety Week. The school children were provided the opportunity of visiting the main fire station where they were educated not only on aspects of safety but also had the chance to learn first-hand what fire fighting is all about.

As part of the burn awareness campaign run by the Kimberley Hospital Complex, kids were given the opportunity to draw any picture with the theme 'burn awareness'. The Sol Plaatje Emergency Services, senior manager, Chief Tinus Pretorius said, "A huge thank you to the medical staff that assisted. It is always an honour to run a programme with you."

The Sol Plaatje Emergency Services thanked the sponsors Easigas, Total Gas and the Caltex Garage in Phakamile Mabija Road for their partnership with the emergency services to make the programme a huge success.

"We also congratulate the public safety team ie Ntanti, Deyon, Lesego, Herlin and Quinton for their hard work and success", said Riaan Janse van Vuuren.

Dr Vernon Wessels

School children visited the main fire station

Enock Mchunu heads up
eThekwini Fire and Emergency Services

eThekwini Fire and Emergency Services' Pakade Enock Mchunu was appointed as the chief fire officer effective 1 February 2017. Chief Mchunu is celebrating his 27th year in the fire service this year. Fire and Rescue International met up with Chief Mchunu to find out what makes him tick, his background, management style and his vision for the fire service going forward.

Background

"Growing up I did not know anything about the fire fighting and rescue profession. I saw a circular at the Pinetown Civic Centre advertising for an assistant fireman, applied and was called for interview and employed," said Chief Mchunu. Employed at Pinetown fire station as an assistant fireman in 1989, Chief Mchunu started his career and was promoted to fireman in 1991. In 1993 he was employed in Durban as a fireman until 1994, after which he was appointed as station commander/division officer at Durban Fire and Rescue. In 2001 Chief Mchunu was appointed to act as regional commander and promoted in 2003 to deputy chief fire officer at eThekwini Metropolitan Municipality. He is the only civil servant in his family.

"In the early years, I looked up to every colleague as I needed to learn as much and as fast as I could when I realised the nature of the job. Along the way I identified senior fire fighters and commanders who were open to teaching me various aspects of the job. As you would appreciate, very few African fire fighters were in the fire service and it was a given that individual characters had to play a particular role in my work life. They all taught me discipline, respect, tolerance and reason to work for success," added Chief Mchunu.

He continued, "Naturally participative, I am careful on balancing influence and authority. Diversity awareness is critical to me and I worry myself to realise when I need to be autocratic and when to be democratic. Since joining the service I realised the importance and fulfilment of helping those who cannot help themselves under life threatening conditions. This has progressively grown selflessness in me and a desire to do more."

"To be honest, each rank I held made me see the reality and timeline of rising to the next level. This continued when I was appointed deputy chief fire officer in 2003. I just knew then that I will need to work harder to prepare myself for the CFO role. As for ambition, I have never felt ambitious in my career but naturally focussed on self-preparation, as strange as this may sound, it is true," he explained.

Chief Mchunu continued, "I will always remember action days when turning out to incidents, returning to station or knocking off satisfied, that I did something good out there in the community. I have, over the years, tried to transfer that enthusiasm to the generation after me and now have peace with my leadership role without interfering with them. That is how I have got it out of my system. Listening to people, young and matured by service and age, reading to understand things, sharing my knowledge with colleagues, saying and doing what I have to do without fear or prejudice."

Vision

"My vision is to ensure that all communities are safe and aware that the fire service is there and able to protect and assist them in any manner possible," said Chief Mchunu.

Advice to CFOs and future CFOs

His advice to chief fire officers (CFOs) and aspiring CFOs include, "Visualise yourself as a CFO by a particular reasonable time or year, giving yourself realistic reasons and identifying obstacles ahead of you in your career, preparing yourself to manage or deal with them. Do not be overambitious, selfish or unrealistically over enthusiastic otherwise you will frustrate yourself. Prepare and equip yourself with a variety of knowledge applicable to society in general. Work with people in and out of your employment environment and be ready to learn something from them, whether good or bad. Always avoid a temptation of feeling super human in your step by step achievements. Humble yourself before society and know when to say, it now stops here! Make decisions and live with them. To be indecisive, in my view, is the worst enemy of any aspiring leader in any organisation. Always adopt the attitude that at the level of respect, all are equal, as quoted from Stephen R Covey, 7 Habits of Highly Effective People."

Chief Enock Mchunu

South African TFA team excels in Germany, wins first place for women

Simangele Mbanjwa taking first place for ladies

The 19th Toughest Firefighter Alive (TFA) was held at the Hospital Elisabeth-Krankenhaus in Mönchengladbach-Rheydt, Germany on 9 and 10 June 2017. The TFA South Africa team, led by Mark Smith of City of Cape Town Fire and Rescue, not only participated but excelled in this prestigious and taxing event.

South Africa takes gold!

Durban-based Simangele Faith Mbanjwa of eThekwini Fire and Emergency Services won the women's title! Mbanjwa has been in the top positions in both the TFA South Africa as well as the eThekwini Grinder Challenge, excelling at this extreme combat challenge.

The TFA Germany 2017 was the first international trip for Mbanjwa, joined by Precious Mpungose also of eThekwini Fire and Emergency Services and the first time South Africa women entered the competition.

The challenge is not only physically demanding but mentally as well. "This is the hardest fire fighter competition in the world and it is an event where you can get the strength and physical fitness to be effective at operational incidents", says organiser, Claudia Consoir-Taube.

Name	Age category	Overall position	Position in age group	Station 1	Station 2	Station 3	Station 4	Overall time
Hermanus Gouws	M35	21	5	01:44	02:08	01:35	01:48	07:15
Ryan Abrahams	M30	37	7	01:31	02:24	01:40	03:00	08:35
Alno Kroon	M	39	17	01:46	02:43	01:28	02:41	08:38
Charles Bishop	M40	43	5	01:36	02:56	01:44	02:43	08:59
Rudi van der Bergh	M35	47	8	01:37	02:39	01:40	03:18	09:14
Simangele Faith Mbanjwa	Women	84	1	03:44	04:59	02:59	03:34	15:16
Mark Smith	M50	109	4	02:11	08:00	02:49	08:00	21:00
Precious Mpungose	Women	124	5	02:37	09:00	09:00	03:32	24:09
Relay								
TFA South Africa Team		7						08:10

Team South Africa

Mark Smith, City of Cape Town Fire and Rescue Service
Ryan Abrahams, City of Cape Town Fire and Rescue Service
Arnold van Lill, City of Cape Town Fire and Rescue Service
Alno Kroon, City of Cape Town Fire and Rescue Service
Rudi van der Bergh, City of Cape Town Fire and Rescue Service
Precious Mpungose, eThekwini Fire and Emergency Services
Simangele Faith Mbanjwa, eThekwini Fire and Emergency Services
Manie Gouws, Gauteng Department of Health
Charles Bishop, NTPA Richards Bay

Team South Africa attended the TFA Germany Challenge under the auspices of the non-profit organisation, Fire Fighters for Excellence Foundation.

TFA stations

The four station consisted of the hose drag after coupling it to the fire engine and the hose roll; the Keiser Force machine with 80 kilogram dummy drag, tunnel crawl with 20kg canisters and three-metre wall climb; staking a ladder against a wall then running up the tower with two foam containers, hoisting two lengths of hose to the top, taking the foam drums back down and then screwing on a nozzle and the final and four stage, the stair climb. Bunker gear and breathing apparatus were worn during each session.

Francois du Plessis provided some transport solutions for the team by shuttling the daily from the hotel to the event.

Team South Africa also had the opportunity to visit some of the heritage sites and beautiful architectural buildings and cathedrals in Mönchengladbach, Bonn, Cologne and Reydt assisted by Thomas Katz.

A big congratulations to Simangele Mbanjwa for her excellent performance and also to the rest of the South African Team for their performance, camaraderie and team spirit. Fire and Rescue International is honoured to have been one of many sponsors who made this trip possible. Thank you to all the sponsors and organisers and especially to Mark Smith for his leadership and support.

Staffelergebnisse TFA 2017		
	Team	**Zeit in min**
1	Czech TFA Team	6,41
2	Team PSP Poland	7,07
3	BF Göttingen	7,15
4	Armin`s TFA Team	7,25
5	Torva Firefighters Estland	7,58
6	TFA Team Österreich	8,04
7	TFA South Africa Team	8,10
8	TFA Team Dinslaken	8,47
9	Firefit Team Kassel	9,00
10	TfaXCross	9,33
11	Salzgitter Firefighters	9,57
12	Anwärter I	9,58
13	TFA Team Lünen	9,58
14	Anwärter III	9,59
15	TFA Team Leinetal	10,00
16	BF Minden	10,11
17	Hertfordshire GB	10,19
18	TFA Team FW Uchte	10,46
19	Anwärter II	11,05
20	Firefighter Frankfurt	11,15
21	Team Grafschaft	11,21
22	TFA Team Hochneukirch	13,07
23	Sportverein - Gruiten	13,32
24	Bundeswehr Feuerwehr	14,19
25	TFA Team Mönchengladbach	14,31
26	TFA Team Kempen	14,39
27	TFA Girls	14,59
28	TFA Team Königswinter	19,00




SCOTT
SAFETY



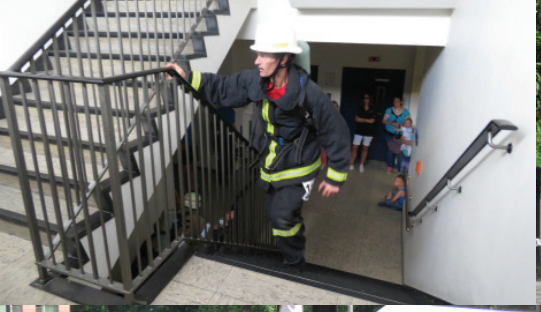
Wir kümm




RESCUE
CAPE TOWN


8
TFA





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Vehicle extrication with limited staffing levels:

surviving in a cut-back environment

By Colin Deiner, chief director, disaster management and fire brigade services, Western Cape Government

Go to virtually any class on motor vehicle extrication or read any instruction manual on the subject and no doubt you will find that the optimum recommended crew requirement for a light motor vehicle extrication operation is five:

- The incident commander, who has an overall view of the incident and should be hands-off at all times lest he lose sight of the big-picture
- Two rescuers. They are responsible for conducting the inner-survey of the crash site, stabilising the vehicle(s) and performing the extrication
- Two medics, responsible for accessing and evaluating the patient, emergency care and then finally managing the release of the patient

This is the ideal situation. Everyone working together with all efforts focussing on safely accessing, treating and extricating a live patient with a good chance of surviving the ordeal. Every minute spent on such an extrication should show progress on the previous minute and bring the team closer to this goal. If you respond to a two- or multiple-car collision, you would ideally want to have a five-person crew for each car. That is, of course, the ideal situation. Times, as Bob Dylan famously said, "they are a-changin". No longer do we have an ideal number of rescuers responding to an extrication incident. The call rates are unfortunately getting bigger and the responding crews are getting smaller. It is nowadays more often the rule than the exception that a crew of three responders will be the sum total of the ▸

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A limited-manpower rescue is all about team work

rescue effort. There are a lot of reasons for this, mostly linked to budgets and the failure of management to appreciate the risk to which their staff is subjected. I could write a book on that subject so best that I don't get started on that point.

In this article I want to focus on how we can deal with the challenge and still give the patient a good chance of survival. I am in no way implying that a crew of two or three is ideal. It is, unfortunately, a daily fact of life for emergency responders across the country.

The first thing you have to do when approaching this challenge is to add a limited-manpower rescue evolution into your training. You can accomplish a great deal with a well-trained three-man unit, if they are able to anticipate the other team members' moves and adapt their own activities accordingly. YOU HAVE TO TRAIN TOGETHER. This is very important. A limited-manpower rescue is all about team work. You can have three fantastic rescuers together but if they are not used to working with each other, you will lose out on a lot of their talents and ultimately the patient release will be compromised.

Let me explain: In a limited-manpower extrication where three people are doing the work of five, each rescuer has to take on additional tasks that rely heavily on their fellow crew members doing the same. This must be seamless and each rescuer must know what those additional responsibilities are and who will be doing what.

During the 1990s and up until 2003 the South African National Extrication Challenge included a limited manpower evolution as part of the final round of the competition. In those years we were fortunate to see some of the best practices being developed by some of the most enterprising rescuers in the world. I recall a highly experienced international assessor from Scotland, Bill Denny, saying to me after the final round at the National Challenge in Cape Town in 1999, that the limited manpower evolution performed by the Boksburg team was the best evolution he had ever seen, even those including five members. It was also included in the 2001 World Extrication Challenge, which was held in Johannesburg. Unfortunately, we received a lot of resistance, especially from the Australian and British competitors who cited safety concerns as the reason for their opposition to the evolution. It is indeed a pity that the World Rescue Organisation's (WRO's) rules do not allow for a limited manpower evolution as it would, in my opinion, challenge the best extrication teams in the world to find solutions to a real-world problem that many services have to face.

So to the rescue

Despite the fact that there are only three rescuers available, all the tasks that need to be performed still have to be done. This includes initial safety, size-up, tool

staging, vehicle stabilisation, patient assessment, patient access and victim extrication. You also need one of the members to take command of the incident.

The obvious point of departure in planning a limited manpower evolution would be to decide which additional functions can be paired and who should be taking them on board.

In a five-person evolution the incident commander (IC) will not touch a rescue tool. His/her job is to take up a position that provides (a) a view of the extrication zone, (b) a clear view of the area immediate surrounding the hot-zone and (c) clear communication with the medic in the wreck and the rescue crew. The IC must also be free to move around the wreck and note certain conditions that may be deteriorating such as stabilisation, weather changes etc and then be able to direct the rescue crew to respond accordingly. In a limited manpower evolution it will be necessary for the IC to get 'hands-on' but at the same time give attention to the prevailing conditions. Upon arrival the IC will direct each of the two rescuers to assist in the initial size-up. While the IC does a quick walk around the hot-zone, he/she should note the position of the vehicles, prevailing hazards such as utility lines, fuel spills, traffic and location and number of victims. At the same time one rescuer should do a walkaround in a clockwise direction while the other does a walkaround in the opposite direction with their collective attention focussing inward. Both rescuers should note the position of the wrecks, location and condition of victims, degree of entrapment and possible extrication options. It is always good for one of these rescuers to carry a small bundle of cribbing consisting of a few 4x4 blocks and wedges that can quickly be deployed into an area for initial stabilisation. Chock as you go. The other rescuer will be the one who should make contact with any victims. Remember that the moment you make contact with a victim you should not break that contact. This might remove your third rescuer from the feedback process, which should happen immediately after the initial size-up is completed. It might not be always possible but in this situation it might be advisable to delay making verbal contact with any victim until the report back to the IC has been completed. We are talking seconds here and the impact on the victim should be negligible.

The IC should, when approaching the scene, carry a fire extinguisher in one hand and place it in a position designated by him/herself before starting the size-up. He/she can also carry out a number of preparatory activities while doing the initial size-up. This can include establishing window access and hazard management, ie engine access, battery management, ignition off, air bag immobilisation, vehicle in park, etc.

The three crew members should then meet at a central point with both rescuers giving their report on their observations, whereafter a plan needs to be formulated. The IC should use the information gained by the team to establish the initial mode of operation. That should be kept simple and only a few options should exist. This could be rescue, body recovery, rapid extrication, prolonged extrication, C-spine extrication or simple entrapment without C-spine extrication. One rescuer will almost exclusively be tied to caring for the patient while the other two will have to work together to perform the secondary stabilisation, glass removal, patient access, extrication and patient removal. Your IC will have to assist the tool operator in such tasks as holding hard protection in place, removing windows, placing cribbing in position and rigging stabilisation jacks. Although these tasks will demand all of your attention, don't get tunnel vision. Take a step back whenever possible and make sure the scene is stable.

The medic will, to a large extent, dictate the direction and pace of the extrication and patient removal and therefore it is vital that communication is maintained at all times.

You may ask, "How can you operate two tools at the same time while you only have three rescuers and one is already tied up to the patient?" Well, let's take the example of a sidewall removal with only two rescuers using two different tools: While the medic is administering whatever life support is needed to the patient and can be done under the circumstances, both rescuers work together to secure all safety restraint components and remove any interior cladding. The IC uses the hydraulic cutter to perform a complete cut high on the B-pillar, including door and window frames, while the second rescuer pops the rear door latch. Should there be any doubts about the coordination of the operation, the rear ▶

The medic will, to a large extent, dictate the direction and pace of the extrication and patient removal

- door should be popped before the cut is made to ensure a stable platform for the spreader to work against. The IC can then position himself at the rear door opening and make a relief cut on the bottom of the B-post. At the same time the spreader operator should pinch the fender above the wheel well and remove the body panel from the suspension hub to expose the front hinges and the inner fender rail. Once the body panel is separated, use the spreader to compress the fender rail between the suspension hub and the firewall. This will allow the IC to use the spreader to make a complete cut of the compressed fender rail. At the same time the second rescuer can use the spreader to spread the relief cut at the bottom of the B-post. Once the B-post has sheared off, you can use the cutter to take off the top hinge.

  The next step would be to pinch the A-post at the bottom between the dash assembly and the rocker. At the same time use the cutter to perform a cut high on the A-post. The IC can position a ram between the rocker and the upper A-post. The spreader can then be placed in a position at the bottom of the A-post relief cut and once the ram is maxed out on the roll, the spreader can take over and complete the lift.

  By forming a picture in your mind of this evolution you will appreciate that it should not take the IC's attention away from the overall picture for extended periods.

  The IC must have a large degree of trust in his/her team's abilities but must also recognise when they are in over their heads. A multiple-victim incident will require more crews and those must be called for upon arrival. More time will then have to be taken to prioritise the victims. Not only will the condition of the victims play a role here but also the degree of entrapment. If the first-in crew can release someone quickly while waiting for back-up before going on to a more complex entrapment, then this should be considered.

  Limited-manpower evolutions are not for multiple victim incidents. You might, however, as overall incident commander on a major incident with more than one vehicle involved, have to deploy three-person crews to different entrapments. The strategies and tactics of limited manpower evolutions will then also be of value.

Planning

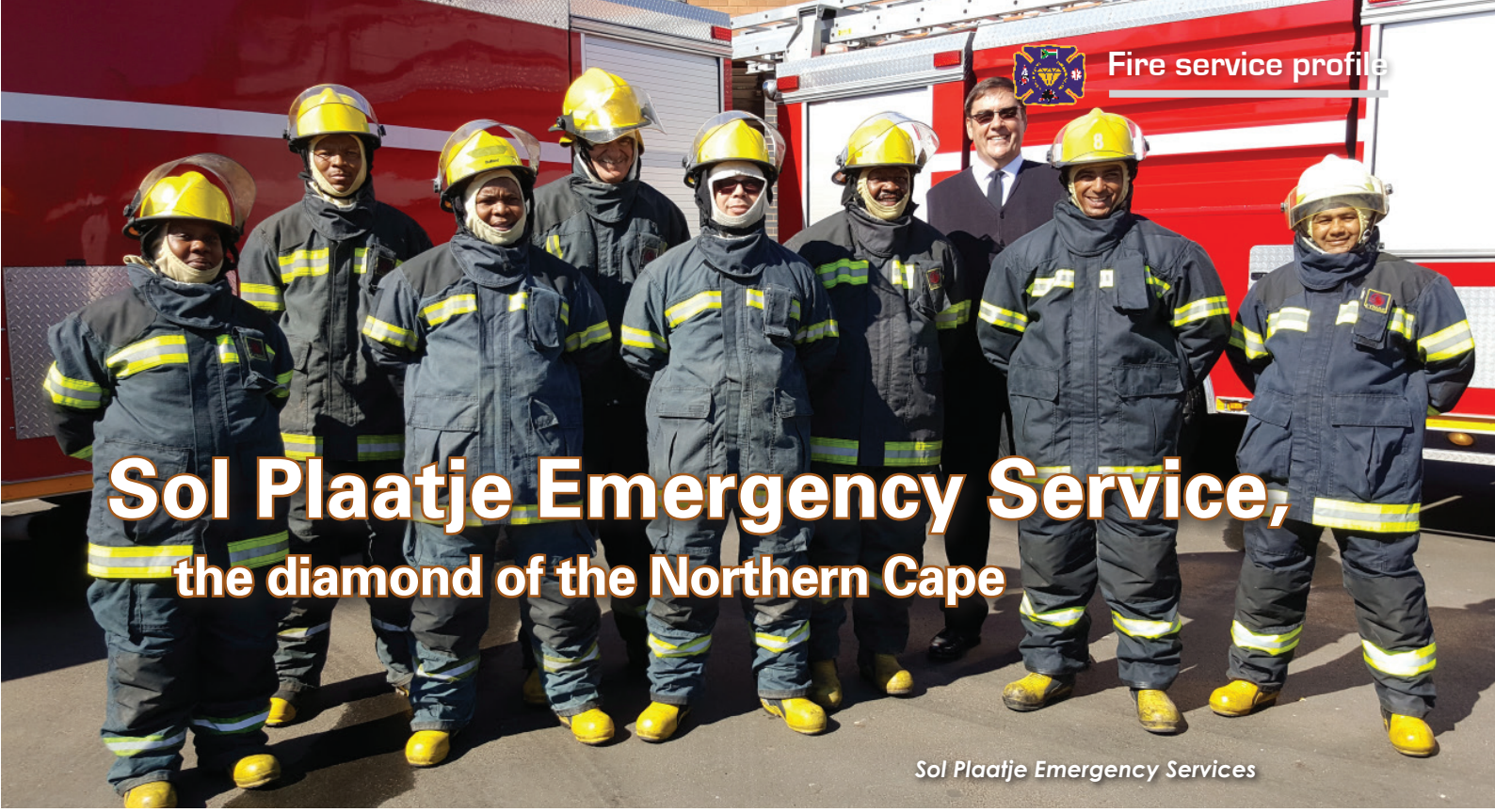
The effective deployment of a limited-manpower crew will depend on the thought you give to the system and the planning that goes into it. When equipping your rescue rig, consider which equipment will need to come off first. Preconnected hydraulic, electric and air reels are other options that allow for quick tool deployment. Also consider the weight of the equipment to be lugged around and try to mount them in positions on the rig that will allow you to easily deploy them or at least get them to the staging area without putting your back out.

You would do well to consider grouping certain pieces of equipment in the order in which they will come off the rig. Moving heavy equipment might be overcome by using wheeled totes. Grouping your initial stabilisation cribbing into bundles tied together with rubber bands will enable a single rescuer to move two bundles of cribbing to the scene relatively easily. Knowing which equipment should be removed from the vehicle will allow you to group the equipment together for simultaneous placement on your tote. Your first tote may contain step chocks, some 4×4s, a staging tarp, a windshield saw and soft protection. The second bundle should contain the remainder of the shoring material and some boards for hard protection. You can then plan the rest of the equipment bundles according to your crew's skills and tactics.

Develop a varied arsenal of skills and find the tools to support those skills. Having a few wedges taped to your helmet with duct tape or rubber bands could help you to keep a car door open while you are manoeuvring your hydraulic spreader in place (the same type of wedges you would use to keep a door open while moving hose through a structural fire). Hone your reciprocating saw and air chisel skills. In previous articles I have elaborated on what a force multiple hand tools can be if they are properly integrated into an effective extrication system. Always have your hand tools available as a backup for your hydraulics. If your team are able to hone their hand-tool skills to a cutting edge, you might see them using them as their preferred rescue tool.

In closing

Emergency services management have a responsibility to ensure that they are provided with enough personnel to deploy to the stations and ultimately the response units that have to perform the various fire fighting and rescue functions they are mandated to do. We all know, however, that this is a difficult and arduous task and most of the time the size of rescue crews reflects below-normal staffing levels. It is up to us to find the best 'force-multipliers' to help us do our jobs to the best of our ability. It might require a move away from the tried and tested. At no point, however, should we compromise our personnel or patients' safety. Some creative thinking and planning with a clear focus on our primary task is necessary to accomplish this.



Sol Plaatje Emergency Service,
the diamond of the Northern Cape

Sol Plaatje Emergency Services

The Sol Plaatje Local Municipality is situated in the Frances Baard District Municipality in the Northern Cape Province of South Africa. It is bordered by Dikgatlong in the north, the Pixley ka Seme District in the south and west and the Free State Province in the east. It is one of the four municipalities that make up the district, accounting for a quarter of its geographical area. It includes the diamond mining city of Kimberley.

Sol Plaatje Municipality is named after Solomon Tshekisho Plaatje, who was a South African intellectual, journalist, linguist, politician, translator and writer. Solomon Plaatje was born just outside Boshof in the Free State Province.

Kimberley is the capital city of the Northern Cape Province and is located approximately 110km east of the confluence of the Vaal and Orange Rivers. The city has considerable historical significance due to its diamond mining past and the siege during the Second Boer War and is known for its 19th-Century diamond mines such as the deep, hand-dug Big Hole. British businessmen, Cecil Rhodes and Barney Barnato, made their fortunes in Kimberley and the roots of the De Beers company can also be traced to the early days of the mining town. Nearby, the Kimberley Mine Museum is a recreation of the town in its heyday and displays jewellery and uncut diamonds.

Kimberley was the first city in the Southern Hemisphere and the second in the world after Philadelphia to integrate electric street lights into its infrastructure on 2 September 1882. The first Stock Exchange in Africa was also built in Kimberley, as early as 1881.

South Africa's first school of aviation to train pilots for the proposed South African Aviation Corps (SAAC), was established in Kimberley in 1913. Known as Paterson's Aviation Syndicate School of Flying, it is commemorated in the Pioneers of Aviation Museum and a replica of the first Compton Patterson Biplane preserved there, situated near Kimberley Airport. In the 1930s Kimberley boasted the best night-landing facilities on the continent of Africa.

Fire service

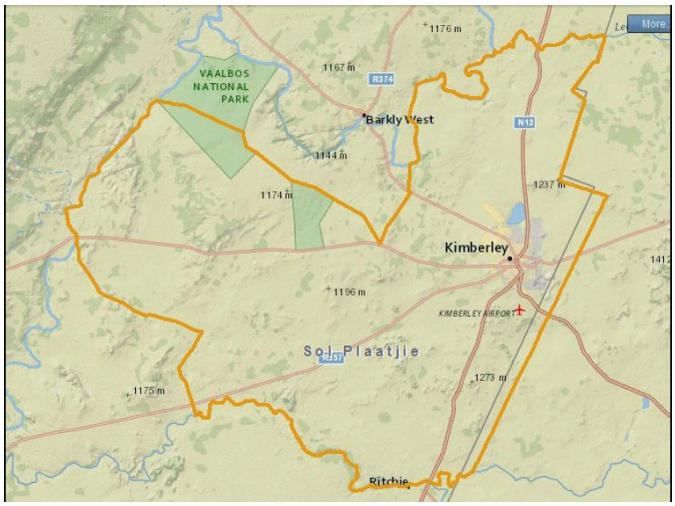
Kimberley Fire Service (now Sol Plaatje Emergency Services) was established in 1887 and has been serving the community of Kimberley for 130 years. The first fire station was situated in Stockdale Street in Kimberley and Lieutenant Doyle was the person in charge of the fire service. The fire tender was a steam engine pulled by horses.

Sol Plaatje Emergency Services has an operational area of 3 800km^2, an annual budget of R32 000 000, 1 300 emergency calls per annum, services a population 280 000 and is headed up by Chief fire officer Martinus (Tinus) Wessel Pretorius. The service headquarters has been situated in its current location since 1957 ie for 60 years. A satelite fire station is situated in Ritchie and one in Galeshewe. A new satelite fire station will be built in Homevale extension and there is a seasonal station at the Langley resort.

Organisational structure

Sol Plaatje Emergency Services' organisational structure is constructed of its chief fire officer (CFO) Tinus ▶

Chief Tinus Pretorius



Sol Plaatje Emergency Services is situated in the diamond mining city of Kimberley

Pretorius who is the senior manager, emergency services. Chief Pretorius is supported by three managers ie Riaan Janse van Vuuren for support services, Anthony Johannes Möller (acting) for operations and training and Ntanti John Sephiri for public safety and disaster management. Sol Plaatje also has three station commanders, Edward Mahri, Cameron Grant Andrews and Anthony Johannes Möller. The service employs 60 fire fighters on a two-shift system at its three stations.

Risk profile

Sol Plaatje's risk profile includes its central business district (CBD) area as a category A high risk area. Category E risks include hospitals, large shopping malls, airport, prisons, places of safety, old age homes, schools (secondary, primary, pre-primary) and petro-chemical depots. "We ensure annual public safety inspections on high risk areas as well as operational shift visits to familiarise ourselves about risks and to study contingency plans with identified high risk areas. We also have annual situational drills to test/evaluate high-risk area contingency plans."

Operations

Sol Plaatje Emergency Services currently responds from three fire stations, one of which is its headquarters. A new station in Homevale is on the cards for the next financial year. The service deploys a 24 hour, two shift system that runs from 8h00 to 17h00 and then on standby for 14 hours on the premises. The most common incidents the service responds to are structural and wildfires

Riaan Janse van Vuuren, with a future fire fighter

The recently refurbished call centre

Martha Nkewu, control centre operator; Ruth Vantu, clerk; Nabeelah Gool, clerk and Renei Basson, control centre operator

New lockers offer added security for staff

Sol Plaatje Emergency Services

as well as vehicle extrication, high-angle and confined space rescues and hazardous chemical spills.

All operational personnel are trained in all types of incident response including structural, veld and forest and petrochemical fires, handling of hazardous materials (hazmat), vehicle extrication, emergency medicine up to intermediate life support (ILS), high-angle rescues (HAT) and swift water rescue. "As far as urban search and rescue (USAR) is concerned, we do not have specialised USAR capacity, only basic capacity," added Chief Pretorius.

Equipment

We asked Chief Pretorius what operational equipment shortfalls there are and he replied, "Will you ever have enough equipment? As technology advances there is always a need for better and more appropriate equipment. Fire services are in the habit of always improvising if something falls short. Sometimes to our own detriment."

He added, "We have vehicles and equipment on our IDP to cater for our current replacement programmes and for future needs. We have budgeted for a new multi-purpose vehicle as well."

"A new fire station is also on the cards and is included in our 2017/18 budget, which is already approved," said Chief Pretorius.

Response vehicles include:

Vehicle	Year	Km
Scania major pumper	2009	108 097
Freightliner FL80	2001	168 201
Rosenbauer	1995	196 108
Ford Snorkel hydraulic platform	1980	46 051
Nissan UD290 water tanker	2008	71 485
Mercedes Benz water tanker	2012	47 283
Two hazmat trailers		
An emergency lighting and breathing apparatus trailer		
Four wildfire units		
Six light delivery vehicles (LDVs) as service vehicles		

"Our 1980 model Snorkel hydraulic platform's engine is going to be overhauled as well as its hydraulic system," said Chief Pretorius. All the above vehicles and equipment are on schedule for continuous preventative maintenance to ensure operational readiness at all times. The fire department also employs two full time mechanics and assistants who are constantly busy with preventative maintenance programmes on the fleet as well as the equipment.

He added, "We have an up-to-date data base of all our fire hydrants' locations and water pressures. Some of our hydrants are still underground. The hydrants in our new areas are above ground. We also have a full time hydrant inspector to ensure a seamless response."

On his wish list, Chief Pretorius cites an incident command and control vehicle, fully equipped to manage any type of incident from. "Actually, my wish list is too long to mention!" he added.

Staff

We recruit members of the public as volunteers in the fire service. They are provided with training on the same level as full time fire fighters. As soon as permanent positions are open they may apply for the position. Other more senior positions first need to be advertised internally if we cannot find a suitable internal candidate the position is advertised externally. To apply for any vacant position the minimum requirements for the specific position need to be met.

The 1980 model Ford Snorkel hydraulic platform

The Scania major pumper

Blanket hand over as part of disaster relief

Jarrad Anderson and AJ van der Merwe

Currently, all personnel are permanent workers, totalling 87, 10 of which are female, two operational and eight in the control centre. "We will be appointing 20 reservists in the next year to ensure new well-trained personnel for the planned new fire station. Our new organogram has been approved and will bring the total number of personnel to 132," added Chief Pretorius. "All personnel are trained in the areas of use and are competent. We are currently focusing on more specialised training courses to cater for the needs identified."

Chief Pretorius responded to our question whether he feels that the service has enough competent staff for the incidents at hand, "Yes but continuous retraining takes place to ensure operational readiness."

A school visit during National Fire Safety Week

Training

Sol Plaatje Emergency Service's training section, in collaboration with operations, identifies the training needs and then presents a programme for the quarter to management for approval. Training is then presented every day for at least two hours per day on shift. "Most of our training is done internally. Only for specialised courses such as hazmat technician and EMS training, personnel are outsourced," said Chief Pretorius.

Challenges

Challenges faced by the service include an aging fleet and budget constraints. Chief Pretorius is very optimistic about their challenges and added, "We keep up with the challenges through continuous training and retraining. We also implemented a preventative maintenance programme on all vehicles and equipment."

Meet Chief Tinus Pretorius

Sol Plaatje Municipality's senior manager for emergency services, Chief Tinus Pretorius, has been in the fire service for over 43 years. Fire and Rescue International met up with him in Kimberley to find out what made him join the fire service and share his journey to his current position with our readers.

Career

Chief Pretorius started his career at the then Pretoria Fire Department in January 1974 as a junior fire fighter. In January 1981, he joined Sasol Secunda as a leading fire fighter and moved through the ranks to become the fire chief at Sasol 2 in August 1987. After the amalgamation in 1992, Chief Pretorius became chief fire officer for Sasol 2 and 3. On 1 July 1995 he was appointed as chief fire officer in Kimberley, now Sol Plaatje Municipality, where he still serves today.

"The challenges to work with members of the community during emergency incidents and to sit back afterwards and to realise that my actions made a positive difference in somebody's life on the day, is what made me become a fire fighter," said Chief Pretorius.

When questioned about at which point in his career he realised that his ambition was to become CFO, he responded, "I had a number of goals in life and I am privileged to say I was able to meet each of my goals through hard work, the support of my family and the grace of God."

We asked him what factors kept him in the fire service, "The fact that I am willing and able and can still make a difference."

The biggest impact on his career thus far he cited as the changes that took place in our country and the fact that he could make a difference.

Mentors

He cited a number of mentors that played a major role in his life such as Hannes de Beer, WP du Plessis, Nic Swanepoel, Chris de Wet, JAS van Straaten and Eddie Pohl Jonker. "They all were specialists within their fields of expertise and never accepted that a problem can't be resolved. Their motto was, 'where there is a will there is a way'", added Chief Pretorius.

Management style

We asked Chief Pretorius about his management style and he replied that it is very democratic. "I want to see myself as a democrat because I want people to participate in the decision making process as it is the only way that they can own the decisions made."

Chief Tinus Pretorius

When questioned whether he misses the operational life, he reacted, "Absolutely but there is a time to realise that you are part of senior management and need to withdraw. The fact that I could share my knowledge and expertise with the younger generation and the fact that they appreciate it was very satisfying for me."

His advice to fire fighters and fire chiefs is, "Don't let the challenges of today be the barriers of tomorrow. Where there is a will there is a way. We are all facing challenges every day. It is how we deal with those challenges that will determine the outcome of tomorrow."

Incidents

The largest incident attended to by the service was a train accident and a bus accident with multiple casualties. "We also responded to a derailing of a train containing hazardous chemicals.

Fire safety

"We run a number of fire safety awareness programmes for schools and community members per ward." The programme consists of the following:

- Fire safety in and around the house
- Safe storing and clear labelling of all dangerous goods (flammable liquids and gasses)
- Safety distances between shacks before erected
- Basic fire fighting techniques in the informal settlement environment

Fire safety challenges faced by Sol Plaatje EMS include the cooperation of political councillors in the identification process of candidates and attendance by community members to courses presented.

Statistics

1. Population 280 000
2. Size of area covered 3 800km^2
3. Emergency calls 1 300 per annum

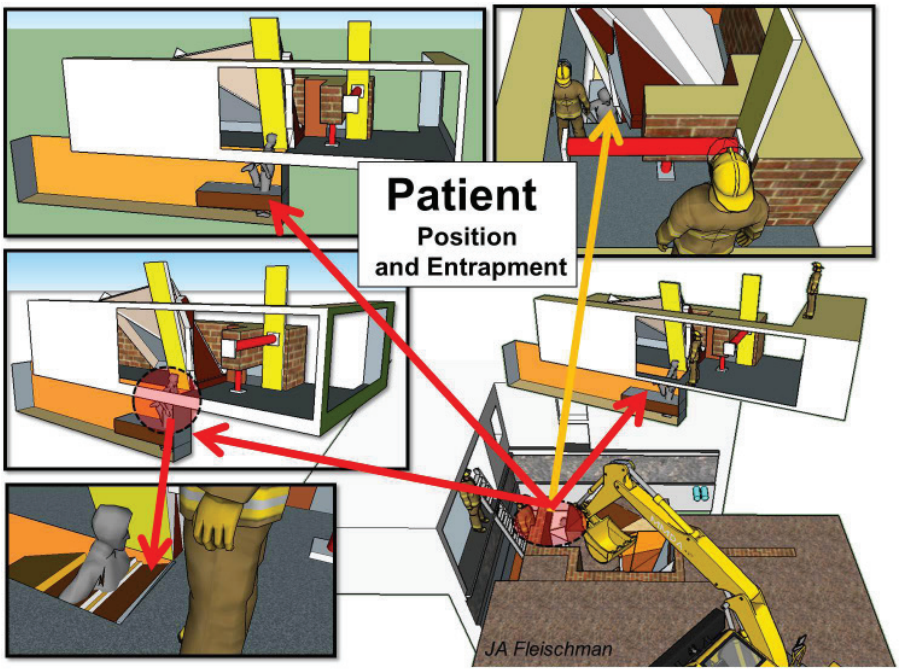
Interagency involvement

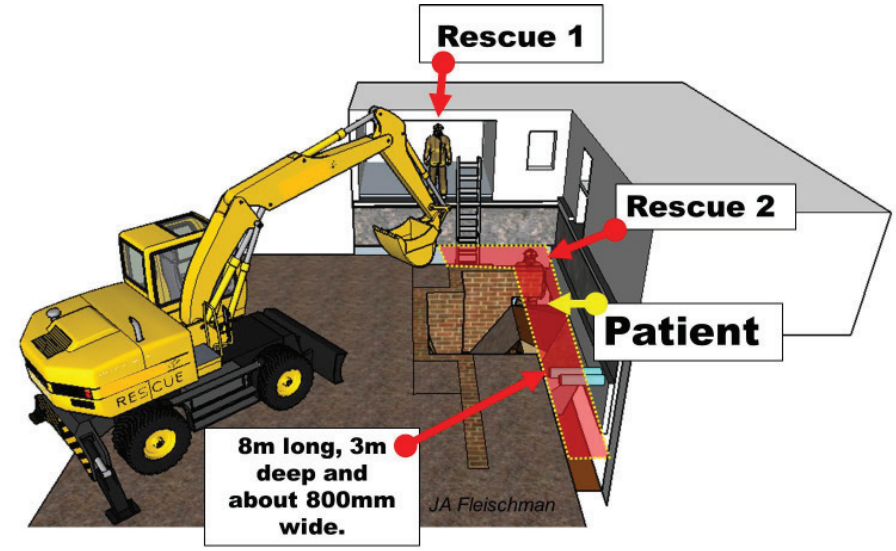
Sol Plaatje Emergency Service is also responsible for disaster management and has a working relationship with the district disaster management centre. "We also assisted with the establishment of a fire protection association."

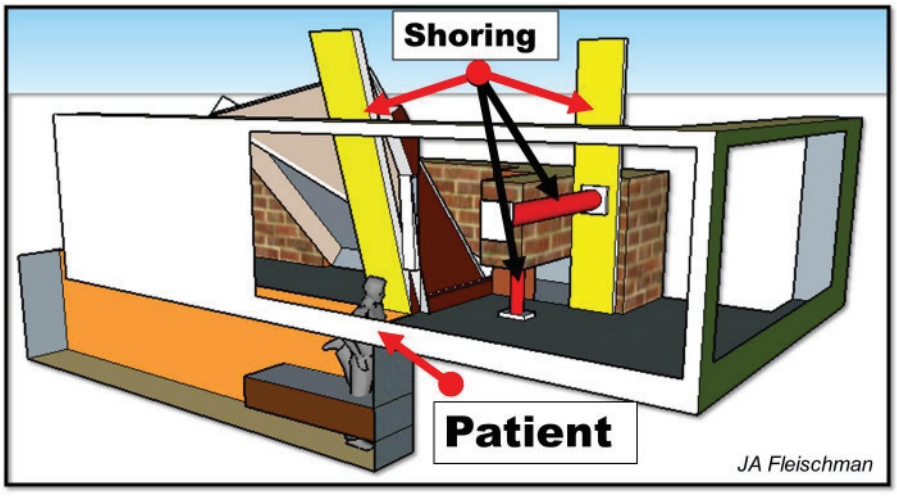
Although not a large fire service, the emphasis falls heavily on fire safety, prevention and awareness. "My management style is to make people believe in themselves and their capabilities by taking full responsibility for their actions. I have an open door policy to address challenges as soon as possible. We need to grow responsible leaders for tomorrow," concluded Chief Pretorius.

Case study:
Dynamic approach at Kloof trench rescue

By Travis Trower, Emergency Medical Care and Rescue lecturer, Durban University of Technology







On 2 March 2017 at 14h28 a message reporting a trench collapse was sent to the KwaZulu-Natal (KZN) Search and Rescue WhatsApp group. This group was established in KZN to collaborate all resources within the province so that, if needed, the technical expertise as well as the resources could be made available. The report stated that there was an African male that had become entrapped from the waist down while working in a three metre trench. The trench was dug alongside a brick wall of a double storey house in an L shape. The section of the trench that had collapsed was approximately eight metres long, three metres deep and about 800mm wide.

In KwaZulu-Natal, there are only two organisations that have the capabilities and equipment to perform an effective trench rescue, namely eThekwini's Durban Central Fire Station and the Durban University of Technology.

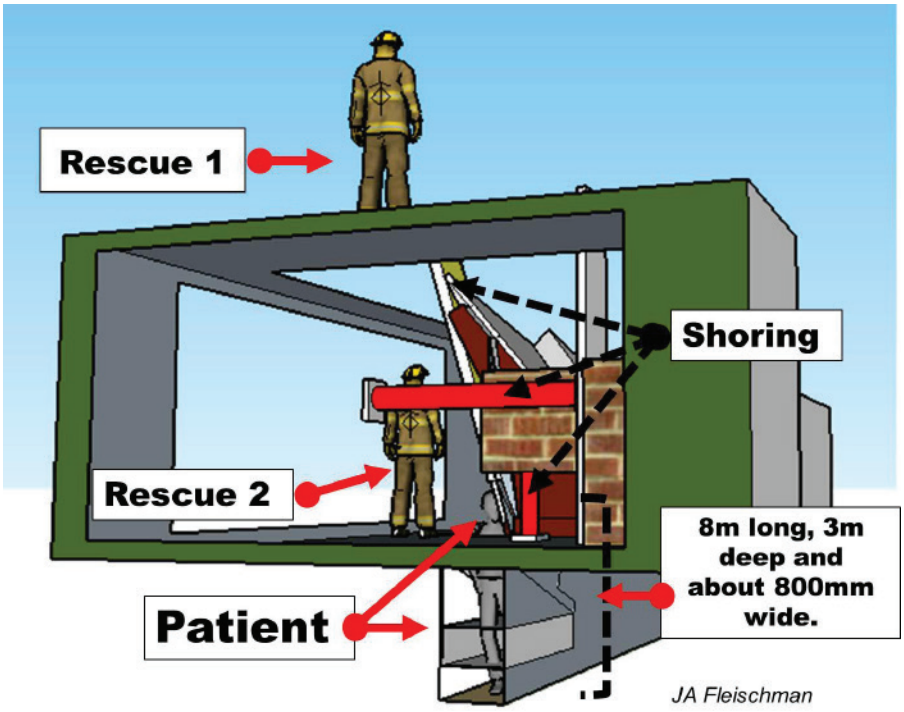
At this time I was still at work and informed the members on the WhatsApp group that I was unavailable. We were informed that the local fire department was en route to the scene. They would assess the scene and dispatch the relevant resources from Durban Central Fire Station if needed. From the first photos that were sent to the WhatsApp group it was quite clear that this was going to be a technical rescue and required trained personnel with specialised equipment.

Upon arrival of the local fire department, the station commander did a scene survey and decided to dispatch the heavy rescue unit from Durban Central. After seeing the pictures and receiving a call from the private services on scene, I decided that I would respond to assist. Knowing the heavy rescue unit was en route, I decided not to pack any equipment as theirs would be available and time was of the essence.

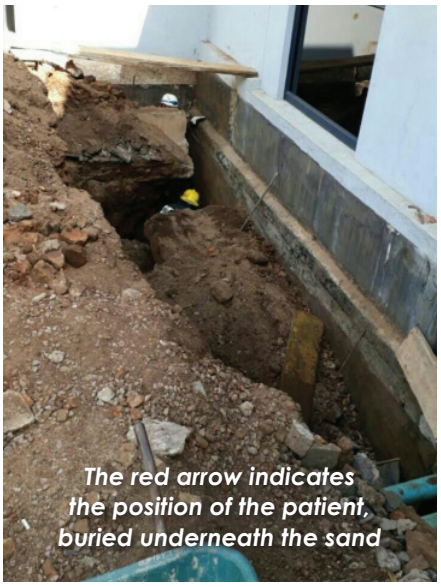
I arrived on scene at approximately 15h05 and discovered that the heavy

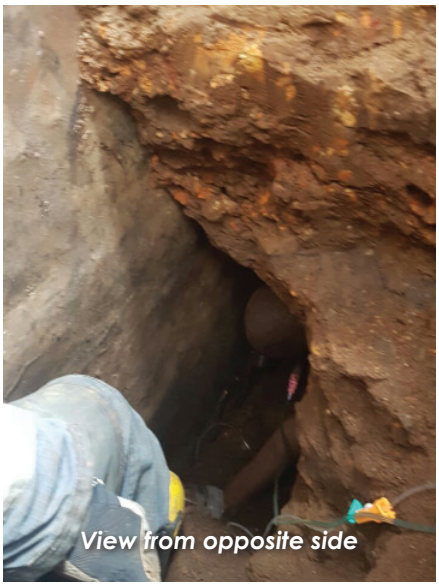
rescue unit was approximately 30 minutes away. After doing a scene survey and discussing a possible rescue plan with the station commander, we decided to create a rapid safe area around the patient. This was done by cutting two metre by four metre construction timber into suitable sizes in order to create a safe area for the patient should any further collapse occur.

There was also a brick wall running alongside the horizontal side of the L trench, which allowed us to enter the trench safely and gain visuals of the patient without worrying about further collapse on that side of the L trench. The wall ended just before the corner of the L trench and was unsupported. It was therefore also decided to shore the wall both horizontally and vertically, not only to create a rapid safe area for the paramedics and rescuers to work in




The trench before it collapsed


The red arrow indicates the position of the patient, buried underneath the sand


View from opposite side


Picture of vertical shore


Picture of horizontal shore


The floating wall before the trench was dug. This wall is only a metre high and needed to be removed in order to gain access to the patient

The soil pile being removed

- but also to prevent any chance of the wall falling, as it was the most vulnerable area of the trench. Ladders were also inserted at the corner of the trench and upon the entry point of the trench. This allowed for an escape route should it be needed. Due to the nature and shape of the collapse, the best possible way to prevent any further soil falling into the cavity that the patient was entrapped in, was to wedge a two metre by four metre building plank approximately one and a half metres long above the patient, supported by the wall.

It was also decided that the soil pile be carefully moved to prevent surcharge load. Information was also gathered from the contract worker as to the nature or purpose of the trench, depth at the time of the incident, length, width and type of soil and also any information with regards to the utilities that could be in and around the trench. The soil was extremely difficult to work with as it was a mixture of A, B and C type soil. This was because the previous excavation was filled with discarded building material made up of concrete, bricks, building sand and mortar, all mixed together with clay. It was extremely difficult to dig into the soil due to the rocks and cohesiveness of the clay. There was also a floating wall running vertically about a metre and a half away from the building.

After the removal of the soil pile, it was decided that the best possible way to free this patient would be to dig next to him and carefully remove the soil into the hole that we had dug, essentially benching the trench and using the soil near him to fill the benched cavity. This would prevent further soil falling towards him and rather channel it away from him. It was decided that the quickest and safest possible option would be to use a backhoe loader (TLB).

Prior to my arrival at the trench collapse, a local volunteer rescue service called to inform me that they could make their TLB available if needed. This was the safest option as the trapped person had about one metre of soil above him and there was no easy way to remove it other than trying to push it into a hole that we would dig next to him. The floating wall also needed to be removed and it would be unsafe to do this manually.

We started by placing a ladder in front of the cavity that the patient was in and then placed a two metre by four metre plank in front of the ladder. This allowed us to communicate with the patient as well as protect him from any falling debris while we were digging. It also allowed us to remove the plank quickly and assess the patient at any time. We decided to start excavating approximately six metres away from the patient opposite the floating wall, digging down to a depth of about three and a half metres and carefully pulling the floating wall away from the patient and into the newly excavated hole. Lifting the floating wall or manually breaking it would inevitably cause the soil to fall into the already small cavity that was around the patient's head.

When we initially moved the TLB closer, the soil was carefully monitored for any movement caused by the vibration of the TLB. Fortunately, due to the nature of the soil, it was quite stable and there was little to no movement.

After digging to a depth of approximately four metres, we successfully managed to pull the floating wall into the excavated hole and begin to carefully pull the soil that was about one and a half metres away from the patient into the newly excavated hole. This was an ongoing process and was done in increments of digging one metre deep and then removing 30 centimetres of soil away from the patient, slowly working towards him. The process was successful, eventually allowing us to gain access to his head and upper torso.

Once the soil was removed from above him, we were no longer worried about any trench collapse.

When the patient was fully visible from the waist upwards, we began digging approximately 30 centimetres next to him and then manually, with our hands, pulling the soil from his legs. This was a lengthy process that took about four and a half hours from when we began digging with the TLB to the freeing of the patient. It was an extremely delicate procedure, hence it took so long.

Patient treatment was ongoing and included placing the patient on 40 percent oxygen. A 1 000ml Ringers solution with a 15 dropper and 16G Jelco was inserted.

A secondary survey was done on the patient. He had no neurological fallout and was able to communicate with us clearly and concisely. He told us that he was not injured, only entrapped. The patient was not complaining of any pain in the beginning but was extremely anxious and was given an initial dose of 5mg Valium. Later the patient was given 4mg of morphine for pain as he was trapped in an awkward position and was also complaining of compression around the lower right leg. After about two hours the patient was given another 5mg of Valium as he started to panic from the sound of the TLB moving closer towards him. Once the patient was free, he was placed on a trauma board and strapped into a Stokes basket. He was then lifted out of the trench and transported to hospital. He was given another 2mg of morphine en route as he complained about pain in his right leg. The patient was discharged the next day.

A big thank you to eThekwini Fire Department, ER24 and Netcare911 for assisting in the rescue and especially a big thank you needs to go to Rescue Tech for supplying the TLB.

Heavy vehicle extrications

By Neville van Rensburg and Julius Fleischman,
World Rescue Organisation (WRO) assessors and members

The current status of rail transport in South Africa results in more heavy commercial vehicles being used for road transportation of goods and dangerous goods than in the past ensuing in an increase of heavy vehicle accidents. Heavy commercial vehicles' new technology design is much more modern and more advanced and these vehicles also travel much faster than ever before.

In order to be able to execute an effective extrication, a good basic knowledge of heavy commercial vehicle systems and their anatomy is essential for any rescuer attending an accident.

Heavy commercial vehicles present us with quite a different challenge and we need to stay abreast to meet this challenge. Any heavy vehicle that has a special or unique design as to what it does makes it a specialty truck. When we talk about heavy vehicle rescue, most think about the normal long distance trucks. We must also consider the specialty trucks as these can present a more complex extrication than the large and heavy articulated trucks. These vehicles carry all types of cargo such as hazardous chemicals and gas, cement, agricultural products etc.

In South Africa, trucks are involved in approximately one out of every eight motor vehicle accidents.

Cabs
The cabs of many trucks are framed with structural steel work. A heavy gauge rolled-steel channel may run within the confines of the window screen pillar, bulkhead, door posts and rib at the rear of the cab.

Commercial vehicle classification
Commercial vehicle classification has three classes ie light, medium and heavy commercial vehicles.

Light commercial vehicles
Light commercial vehicles include four or six-wheeled rigid light commercial vehicles with an unladen weight of less than 3,5 tons.

Medium and heavy commercial vehicles are broken into further classifications ie rigid and articulated vehicles.

Rigid vehicles
These are built on a solid frame and not designed to pull a trailer. Most of these vehicles have two to three axles.

Articulated vehicles
These include 5-axle articulated (semi), 6-axle articulated (semi), 6-axle rigid vehicle/drawbar trailer combination, 7-axle rigid vehicle/drawbar trailer combination, 7-axle interlink or 8-axle interlink vehicles. These vehicles are designed to carry their payload on a semi-trailer, rigid/draw-bar combination or interlink trailers and include a truck-tractor or prime mover. The trailers also come in a variety of types including flatbeds for hauling building materials or containers, goosenecks, closed box trailer for general cargo and tankers for hauling fuels or chemicals.

Specialty vehicles
Specialty vehicles are designed for a specific purpose. Some examples of these types of trucks would be concrete trucks, dump trucks and grain and vehicle transports.

Structural elements
The structural elements of a truck are divided into the following three categories ie frame, secondary structural elements and the structural drivetrain.

Frame
The primary structural element in all current commercial vehicles is a steel frame that runs the length of the vehicle. The engine, drivetrain, suspension and truck bed are all attached to the frame.

Secondary structural elements
The secondary structural elements are the parts of the truck that carry passengers and cargo; for example the cab and the cargo bed and some other equipment. Although these elements may account for a significant portion of the vehicle's weight, they do not provide the essential strength or stiffness of the truck but can cause the people inside the truck to get injured by secondary objects.

Structural drivetrain
This category includes drive shafts, suspension, steering mechanism and braking components. These elements may contribute significantly to vehicle weight and are critical to the vehicle's safe and reliable functioning.

Commercial vehicles traveling long distances can be involved in vehicle accidents, causing patient entrapments and these extrications can take from a few minutes to several hours.

It is vital that we understand heavy commercial vehicle construction. Patients can lose limbs due to compartment syndrome and the length of time they were trapped in these big, heavy vehicles.

As emergency service practitioners, we need to ask ourselves the following questions:

- How effective are our training programmes in our services on heavy vehicle extrication?
- Do our staff get the necessary exposure to the different materials and places to gain entry and relocat the materials?
- Are our rescue vehicles equipped with rescue platforms for working at the heights of these vehicles?
- Do they understand that the same new car technology challenges and materials we will also find on trucks?

Extrication considerations
It should be remembered that heavy goods vehicles are designed for carrying heavy loads as opposed to passengers. To manage these heavy loads, the type of vehicle construction is immensely strong and subsequently requires higher capacity rescue tools. The large size and weight of these vehicles can present complicated stabilisation problems such as large spaces between the ground and the vehicle, off-centre loads and hazardous cargo.

Heavy commercial vehicle accidents present complicated stabilisation problems

It is vital that we understand heavy commercial vehicle construction

Developing high angle technical rope rescue to international standards

By Charles Royine, instructor, City of Cape Town Fire and Rescue Service Training Academy

Participation in the SAESI Conference, Exhibition, Challenges and Training Events has a direct correlation with the development and growth of technical rescue for the Cape Town Fire and Rescue Services.

Historically, the City of Cape Town Fire and Rescue Service standard of training and the quality of knowledge imparting was never disputed. This was very evident with the pre-2010 Soccer World Cup preparations and the level of training of the technical rescue teams and the special operations teams. However, what was missing was a comparative measuring tool as to how we measured up against other fire departments and rescue teams nationally.

The City of Cape Town Fire and Rescue Training Academy has always strived to present the highest standards and quality of courses, so aligning the applicable National Fire Protection Association (NFPA) standards was a natural flow albeit local challenges with regards to availability of NFPA rated equipment and getting the suppliers and vendors to grasp the importance of understanding performance requirements of equipment in relation to NFPA 1983. Even though a high standard in rescue training was maintained, it still resulted in stunted research and development in many spheres of technical rescue.

Technical rope rescue

High angle rescue was always regarded as the single course that every young fire fighter yearned for. High Angle Rescue 1 and High Angle Rescue 2 allowed you to apply your trade in the vertical realm.

With the SAESI 2013 Conference Exhibitions, Challenges and Training Events, the Cape Town Fire and Rescue Services entered two teams per challenge ie vehicle extrication, ems, high angle rescue and fire fighter challenge. Each and every team performed remarkably well as it was the first time for most of the team members competing at competition level. The aim and the purpose of the challenges was to focus on the benefits of the learning symposium and thus getting emergency services personnel together to network and impart knowledge. This approach was without doubt the catalyst that was required and what stimulated the exponential growth in the development of all spheres of rescue, including technical rope rescue at the City of Cape Town Fire and Rescue Service.

High angle rope rescue fire fighters course

Developing a new high angle rescue approach

On returning from the SAESI 2013 Conference, Exhibition, Challenges and Training Events, the instructors immediately took the experience and lessons learned and objectively measured their own training and the team's performance. The facilitators, assessors and moderators then attended a High Angle 1 refresher course and continued to do an advanced rope rescue course. This first advance rope rescue course was well received and a further advance rope rescue course was presented to a group of young fire fighters from the City of Cape Town and Eden District Municipality.

The academy then formulated a draft version of the Advanced Rope Rescue Course and aligned the tested course material to SANS 10333:2006 and SAQA US 229996. The upskilling of the rope rescue courses also required the development of new skills sheets as this was a totally unique and the first of its kind course in the Western Cape Province and South Africa.

Simultaneously the City of Cape Town Fire and Rescue Training Academy was presenting the Rope Rescue Course, "Conduct a Single Person High Angle I Rope Rescue Unit Standard 115216" at the Western Cape Province Wolwekloof Training Academy to fire fighters from all local municipal fire departments and district municipal fire departments in the Western Cape Province. It should be noted that the High Angle 1 rescue course forms part of the recruit training programme for the City of Cape Town. The local municipal fire departments in the Western Cape ▶

High angle rope rescue instructors course

benefited from this, in that their recruits now also have the opportunity to acquire an accredited unit standard course amounting to six credits and that the notional hours for this course exceed the requirement of the unit standard. This then enables these learners to attend the advanced rope rescue course, including the South African Qualifications Authority (SAQA) US 229996 course for which the City of Cape Town (CoCT) Fire Training Academy is accredited, thus accumulating a further six credits.

This approach of rolling the Technical Rope Rescue Courses to the Western Cape Government Provincial Training Academy resulted in a single standard for rope rescue for the local fire services, as all fire fighters from all local municipalities in the Western Cape are trained with the same equipment, the same instructors and at a central location. The CoCT Fire Training Academy's assessments are of the highest imaginable standard, so the quality of the courses remains impeccably high. Additionally, fire fighters are now credited with a qualification as reflected on the National Learner Database (NLD) due to facilitation, assessment and moderation by an accredited centre of learning along with the COCT Fire Training Academy.

This lead to the 'Where to from here' scenario?

To regard one's own training institution as the best that's available can never be regarded as the precipice of your training development.

The most outstanding aspect about having partaken in the SAESI 2013 Challenges was that it taught us the benefits of the learning symposiums and networking with other fire departments and institutions. It encouraged one to research deeper and apply that research uniformly, not just to one's own service but to make sure that one's understanding of the required standards and how the neighbouring fire departments interpret those standards, are identical and in unison.

So in 2013, when the Western Cape Provincial Government Disaster Management and Fire and Rescue Services approached the City of Cape Town Fire and Rescue Services Training Academy to facilitate the High Angle 1 rescue courses at the Wolwekloof Training Academy, it presented an opportunity for a standardised, uniform approach and skills development training throughout the province.

The question as to where from here, suddenly didn't seem so daunting.

The conventional High Angle 2 Course was always about tyrolean high-lines or cableways, stretcher evacuations and patient packaging. Unlike High Angle 1, there was no SAQA unit standard attached as each presenting agency adhered to its own High Angle 2 curriculum. This proved to be the biggest challenge. How do you train and develop your rescue teams if there is no qualification aligned to the course to provide guidance as to the required outcomes? Also, what is the benchmark and up to what skills level do you train your team members?

With the quality and the level of training that are presented at the CoCT Fire and Rescue Training Academy, the training instructors set about to develop a rescue course that can be regarded as the epitome of technical rope rescue. With the feedback from all the instructors, assessors, moderators and fire fighters that attended the advanced high angle courses, it was evident that we were on the right path to developing a single uniform standard for high angle rescue.

As an accredited training academy, the subject matter experts, small and medium size enterprises (SMEs) and all the instructors set out to develop the Technical Rope Rescue to international rescue standards. This was achieved by looking at international best practices, the South African National Standards (SANS) as pertaining to Fire and Rescue Services, SANS 10090:2003, section 6 - Training for fire fighters and section 10 - Occupational Health and Safety Act 85 of 1993 and in accordance with NFPA 1500 and NFPA 1006 Chapter 5 and 6.

Furthermore, it became evident that it was necessary to incorporate SANS 10333-2006 that deals with rope rescue for industrial rope access. It should be noted that from a fire department technical rescue viewpoint, this standard falls short of the requirements as set out by the NFPA. However, the bulk of the technical rope rescues that Cape Town Fire and Rescue Service attend to are rope access incidents, therefore it is imperative that rescuers can mirror skills and systems used throughout the industrial access fraternity.

By training our rescue technicians in rope access techniques, aligning the equipment strengths and ratings to the NFPA 1983 specification and the training to NFPA 1006, we ensured that we are compliant to the highest standards with no deviation from the NFPA 1201 and SANS 10090.

During September and October 2016, the City of Cape Town Fire and Rescue Training Academy, in conjuction with the Western Cape Disaster Risk and Fire and Rescue Services, presented

the pilot Advanced Technical Rope Rescue Course and the 'Undertake rescues and perform a range of rope access tasks SAQA Unit Standard 229996' at the Wolwekloof Provincial Training Academy. This course was offered to fire fighters who portrayed exceptional skill and acumen for high angle rescue. In the preceding months all local municipalities in the Western Cape Province benefited, as a series of High Angle 1 courses was facilitated at Wolwekloof Training Academy. The best students on each course were then selected for the Advanced Technical Rope Rescue course.

High angle rope rescue fire fighters course

Advanced technical rope rescue systems are complex, so utilising these systems requires additional training and understanding of the physical principles that govern their operations. High line physics, the students' understanding of vectors and resultant forces and their agility within the vertical realm was challenged. Applicable legislation and standards for emergency services response and incident management forms part of the course content.

The High Angle Rope Rescue Technician curriculum is now divided into three tiers or levels:

1. Basic rigging and team-based rescue (Awareness level): Complying with and satisfying NFPA 1006 Chapter 5, rendering assistance at rescues.

- Knot craft and anchor rigging
- Site operations
- Safe persons concepts
- Equipment maintenance and record systems
- Communications methods
- Fall arrest and working at height
- Travel restraint systems
- Belay and working in safe systems.
- Victim management and patient packaging
- Identifying simple mechanical advantage systems
- Operating high and low directional lifting and lowering systems
- Hoisting and lowering of equipment
- Tag-lines

2. High Angle Rope Rescue 1 (Operations level): Conduct Single Person High Angle I Rope Rescue SAQA unit standard 115216.

- Constructing multipoint anchor systems
- Back tie and pre-tensioned anchors
- Patient medical concerns and victim management
- Scene and rescue team management
- Fall factors
- Safe working loads
- Applicable standards and legislation
- Constructing simple mechanical advantage (MA) systems
- Ascending and descending a rope
- Passing a knot in the rope
- Pickoff rescue of a stranded supported patient
- Pickoff rescue of a stranded unsupported patient

3. Advanced Technical Rope Rescue (Technician Level): High Angle 2 Rope Rescue Systems; and rig working ropes, undertake rescues and perform a range of rope access tasks SAQA unit standard 229996.

- Tyrolean high-lines; reeve high lines and pendulums
- High-line single and double carriages
- Emergency scene management
- Constructing compounded mechanical advantage systems
- Constructing complex mechanical advantage systems
- Stretcher scoop rescues: raised flag and porta-ledge stretcher evacuations
- Vertical lead climbing and tower rescues
- Industrial access snatch rescues of rescue subject in jammed chest ascender
- Industrial access snatch rescues of fall arrest rescue subject
- Horizontal traversing: Etrier aiding and traversing a loop
- Re-belay and deviation systems
- Dynamic offset systems and track line deflection systems
- Rope transfers
- Knot pass with a pickoff rescue patient
- Counterforce systems
- Contingency anchor systems
- Anchor bolting: mechanical bolting and chemical bolting
- Risk control and site safety systems
- Artificial high directional systems: gin-pole; a-frames; tri-pods and quad-pods

The 2015 SAESI Exhibition, Conference, Challenges and Training Events paid dividends for the hard work and continuous skills developmental training of the CoCT Cape Town Fire and Rescue teams.

In conclusion, we have to take cognisance of the fact that technical rope rescue is an ever evolving subject. New equipment and techniques are regularly introduced. The development of standard operating procedures (SOPs) for 'working at height' - fall arrest and travel restraint or edge kits are now incorporated in our training programmes and rope rescue operations.

As centres of learning for emergency services personnel, it is our responsibility to stay abreast of development in technical rescue. For this reason fire departments should diarise all future SAESI Conference, Exhibition, Challenges and Training Events as part of their training and developmental calendars.

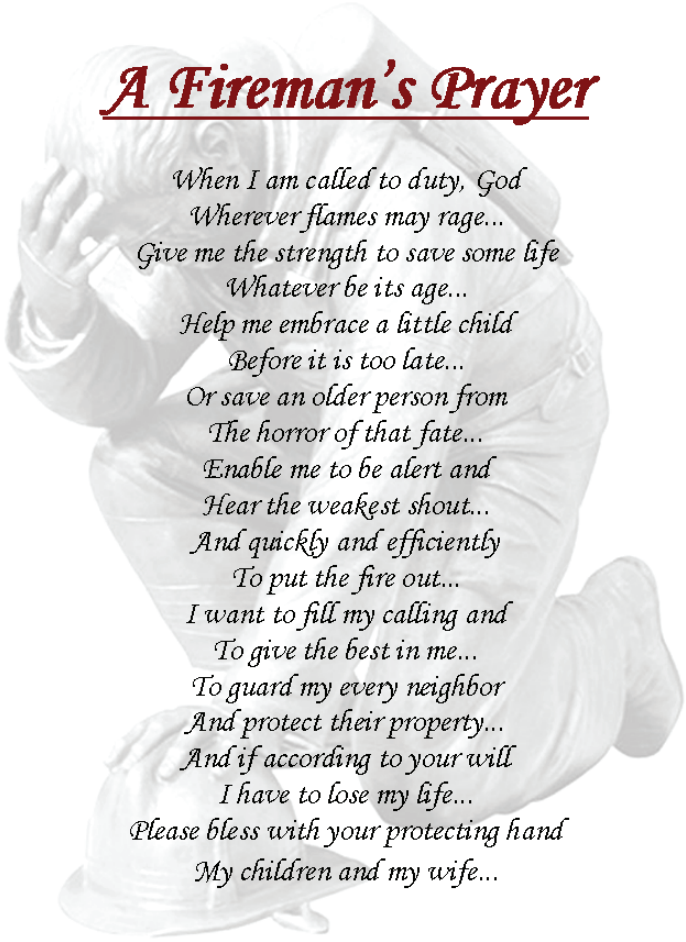
The story behind the 'Fireman's Prayer'

Many know the 'Fire Fighter's Prayer', also known as the 'Fireman's Prayer', but do you know who wrote it and what they were thinking of at the time it was written? At some events that I have attended, it is said that it is a sexist prayer and we should change it into a gender-free version. I searched for the origin of this emotive prayer in order to honour its author.

There is not a fire service or station that I have visited that does not have a version of the 'Fireman's Prayer' on its walls. The depth and meaning of the poem is timeless and to me, genderless. I thought I would share the background to this now famous poem and honour the man who wrote it. What an inspiration!

'Fireman's Prayer'

When I am called to duty, God whenever flames may rage
Give me the strength to save some life whatever be its age.
Help me to embrace a little child before it's too late
Or some older person from the horror of that fate.
Enable me to be alert and hear the weakest shout
And quickly and efficiently to put the fire out.
I want to fill my calling and give the best in me
To guard my neighbour and protect his property.
And if according to Your will I have to lose my life
Please bless with Your protecting hand
My children and my wife.



Today the prayer above is often thought of as simply a poem originally written by Alvin William 'Smokey' Linn. According to his granddaughter, Penny McGlachlin, it is so much more. Her grandfather, Smokey Linn, joined the Wichita, Kansas Fire Department in 1947 after returning from World War II. He retired in 1975 and became president of the local chapter of the Good Sam Camping Club. Linn passed away on 31 March 2004 of complications following surgery.

The end of Linn's prayer can be found engraved on a memorial in front of the new fire station in Brunswick, Maine. According to Woodstock Fire, the following was taken from a speech given by Penny McGlachlin at the dedication of the Cook's Corner Fire Station in Brunswick, Maine on 15 July 2006.

"Alvin William Linn earned the name 'Smokey' when he was 15 by running into his grandfather's burning barn and driving out his Model T truck. He and the truck made it out in one piece but the seat of his pants were smoking. This must have been a sign of things to come because it wasn't the last time he would charge into a burning building."

"When I was about four, I thought my grandfather was born a fireman, lived at the station and occasionally would visit us at grandmother's house. I learned a few things on my visits to the station. One was that if you walk in front of a truck being cleaned, someone will inevitably hit the siren button, just to see how high you'll jump. My grandfather became one of the first Red Cross instructors in Wichita to teach and certify people for CPR and first aid. I was the only eight-year-old in my school that was certified in both, whether I wanted to be or not."

"I've learned a lot about my grandfather since he left us two years ago. My grandmother told me many stories grandpa never told anyone, such as his time in the Coast Guard during World War II on a ship in the North Atlantic that was hit by a torpedo from a Japanese submarine. He was one of the few survivors but most stories were about what had happened on the job. After

Problem solving

By Wayne Bailey

Problem solving is a verb. It's the process of finding solutions to difficult or complex issues.

What are the challenges that face a fire/EMS officer in today's environment? The officer is challenged each day with calls, resources to cover the call, needs today and expected needs in the future from their customers not forgetting the needs of each person who reports to the officer. Let's dive in and discuss the issues with problem solving.

Delivery of resources available to do the job

As a servanthood leader, it's your job to provide the tools to get the job done. What are you currently lacking in the tool box to make the job safer and more efficient? One tool could be a P-card, also known as a purchasing card. This is a typical Master Card or Visa with spending limits of R1 300 to spend each month for incidentals such as food for your crew or a need from one of your customers.

The needs of the engine or truck company

The needs will vary. The biggest need would be support and providing the needed training so everyone goes home at the end of shift. What are the needs after a call that involves a once in a lifetime call like a multi-fatality car crash involving small children? If not taken care of or addressed, this can be a problem later on.

Balancing individual and group needs

Sometimes an individual can suck the life right out of you with their needs. We all know that some need more attention than others. Don't spend 80 percent of your time with 20 percent of the people. Take time to meet one-on-one to find out what's going on at home or just how their kids are doing in school.

Wayne Bailey

Meeting group needs is an easy way to make announcements, cover a past call or just give high fives for a job well done.

In closing, there is no one way to excel in problem solving. My advice is to do more listening than speaking. By doing this, you will see the problem before it gets out of hand. Problem solving should be everybody's job. When a problem is given to you, the next question should be, "What is your suggestion to fix the challenge?"

each shift, he would come home and tell his family about the runs he'd been on. Some were more difficult than others."

"AW 'Smokey' Linn wrote 'A Fireman's Prayer' after he'd been at a call involving children trapped in a burning apartment building. The fire fighters could see the children in the windows but could not rescue them due to the iron bars that the apartment owner had installed. All they could do was try to contain the fire. About one in the morning, Smokey found himself sitting at the station's kitchen table putting into words the emotions inside of him from that evening."

"The words to 'The Fireman's Prayer' are one man's prayer, a man who was more than a fireman to his Lord and Saviour. He was a husband, father, grandfather and a son who knew how precious and short life can be."

The 'Fireman's Prayer' was originally published in a book called, "A Celebration of Poets" in 1958. The last copyright of the book was 1998. It is the family's desire that the credit for the Firemen's Prayer go to the author, AW Smokey Linn.

The 'Fireman's Prayer' is often accompanied by the 'Fireman's Wife's Prayer', whose author is unknown.

Fireman's Wife's Prayer

"The table's set, the meal's prepared, our guests will soon arrive
My husband once more disappears with a hope of keeping a child alive.
While waiting at home alone, our plans having gone awry
My first impulse is merely to sit right down and cry.
But soon again I realise the importance of my life
When I agreed to take on the duties of being a fireman's wife.
While there are many drawbacks, I'll take them in my stride
Knowing "My Daddy saved a life" our children can say with pride.
The gusting winds and raging flames may be his final fate
But with God's help I can remain my fireman's faithful mate."
Author Unknown

Source: Texas Hill Country

2017

July

5 – 7 July 2017
Women in Emergency Services Conference
At the inaugural Women in Emergency Services Conference, a multitude of inventive working strategies and development tools will be explored and discussed to encourage women working and willing to join the sector
Venue: Park Inn, Sandton, Johannesburg
For more information visit: www.amc-intsa.com

23 – 28 July 2017
52nd Annual GSSA Congress
Advancing rangeland ecology and pasture management in Africa incorporating the eighth research skills workshop and a policy and practice workshop
Venue: Wits Rural Facility, Mpumalanga
Contact: Freyni du Toit on 049 842 4335

26 – 28 July 2017
KwaZulu-Natal Industrial Technology Exhibition
KZN Industrial Technology 2017 is a trade event targeted at the industrial industries in the KwaZulu-Natal region
Venue: Durban Exhibition Centre, KwaZulu-Natal
For more information visit: www.iafc.org

26 – 29 July 2017
IAFC Annual Conference and Expo 2017
The IAFC represents the world's leading experts in the first responder community
Venue: Charlotte Convention Centre, Charlotte, USA
For more information visit: www.iafc.org

August

25 – 26 August 2017
Grinder Challenge 2017
Fire fighter competition with categories such as age, gender and relay team.
Venue: Durban, KwaZulu-Natal
Contact: Aghmat Steele, eThekwini Fire Brigade
Email: aghmat.steele@durban.gov.za
Tel: 031 311 5922

30 August – 3 September 2017
World Rescue Challenge (WRC) 2017
The WRC sees world class rescue and trauma teams compete annually in an event designed to challenge emergency service personnel
Venue: Targu Mures, Transylvania, Romania
For more information visit:
www.wrescue.org/World-Challenges/World-Rescue-Challenge-2017-Romania/2017

September

20 – 21 September 2017
The Emergency Services Show 2017
The Emergency Services Show is a two day event being held at the National Exhibition Centre (NEC) in Birmingham, United Kingdom
Venue: Birmingham, United Kingdom
For more information visit:
www.emergencyuk.com

21 – 22 September 2017
16th International Water Mist Conference
The International Water Mist Association is the first association of its kind dedicated exclusively to water mist fire fighting and related technologies
Venue: Barceló Aran Mantegna, Italy
For more information visit:
http://www.iwma.net/home/

25 – 26 September 2017
ICDEM 2017 – 19th International Conference on Disaster and Emergency Medicine
The ICDEM 2017: 19th International Conference on Disaster and Emergency Medicine aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results about all aspects of disaster and emergency medicine
Venue: London, United Kingdom
For more information visit:
waset.org/conference/2017/09/london/ICDEM

27 – 28 September 2017
Disaster Management Institute of Southern Africa (DMISA) Annual Conference
Disaster Management Institute of Southern Africa (DMISA) annual conference
Venue: Coega Vulindlela Accommodation and Conference Centre, Port Elizabeth
Contact: Karin Muller
Tel: 011 822 1634
Email: Karin@disaster.co.za

26 – 30 September 2017
ISFSI 2017 Instructor Development Conference
The Instructor Development Conference provides educational sessions for instructor development
Venue: Fort Collins, Colorado
For more information visit:
www.isfsi.org/links/instructorconference/

October

2 – 5 October 2017
6th EMSSA International Conference 2017
Hosted by Emergency Medicine Society of South Africa and Emergency Care Society of South Africa
Venue: Sun City Resort, North-West Province
For more information visit:
www.emssa2017.co.za/

17 – 18 October 2017
Aerial Firefighting Europe 2017
The essential fire fighting aerospace forum
Venue: Nimes, France
For more information visit:
www.tangentlink.com/event/aerial-firefighting-europe-2017

29 October – 3 November 2017
SAESI Conference and Expo 2017
This year's theme is "Climate change and the emergency services" and will address issues pertaining to climate change and the impact thereof on the emergency services. The impressive speaker line up will feature international and local presentations providing a great networking forum for debate.
Venue: NASREC, Johannesburg
Contact: Lee Raath-Brownie
Tel: 011 452 3135
Cell: 082 371 0190
Email lee@fireandrescue.co
For more information visit:
www.saesi2017.com

To my family

I once thought fire fighting was a thing I'd like to do so I took the tests and passed them, despite protests from you. With some romantic notion I imagined I could be the one who made the rescues that everyone would see.

But it didn't take too long before I knew why I was there, as I pulled that child from its room whose face was filled with fear. And over all the years that passed, the things I had to do, left oh so precious little time that I could spend with you.

His hockey games I couldn't make, the football games I missed, the times you had to go alone, the nights the kids weren't kissed. His first Mass as an altar boy, the night you fixed the heating. Those times I wasn't there to take you all out trick-or-treating.

How many Sunday dinners did you have to eat alone? How many birthday greetings did I send you on the phone? And all those rainy seasons when we had to take vacation, 'cause somehow, when it was sunny, I was always in the station.

When I wasn't there for Christmas, to see our children's faces. When to share Thanksgiving dinner meant to eat in different places. All the nights you stayed up worrying 'cause you heard us going by. How you always said, "Be careful" every time I said, "Goodbye".

The many summer weekends that we couldn't go and play and the many winter weekends that we couldn't get away. The times we had to cancel plans we'd counted on all year, 'cause someone had been injured and I had to be right here.

All the stories I would tell you of the things we had to do, never once did I consider how they had affected you. Like that four-alarm with so much heat, my collar started smoking and the time my tank ran out of air and I had started choking.

Or the time the roof came crashing in . . . we jumped clear with a shout, while the flames lapped at the ladder's tip as they pulled my brother out. I run into blazing buildings, I run up to burning cars, I try to stop the bleeding from the fights at local bars.

I work as I've been trained to, giving children CPR, I use the Jaws of Life on what I'm told was once a car. But it all somehow seems worth it and I know that you don't mind, when I look back at the things I've done and smile at what I find.

The time I breathed the breath of life into that little child, the family that we rescued makes that fire now seem so mild. That time I almost drowned, in freezing water filled with doubt, tearing at that sunken car 'till I finally got her out.

The look of thanks I saw within the eyes of that old man as he sat beside his rescued wife and gently stroked her hand. I know that we're shorthanded, just three men on every truck and that isn't very many, so you never count on luck.

The pump man, standing by his pump making sure there's always water. Then the two men left go racing in, with hoses, where it's hotter.

And on the ladder truck you find, again there's only three . . . one officer . . . one driver . . . and I guess that just leaves me. The driver mans the platform, as the ladder starts to rise, then he stands a silent vigil with his eyes glued toward the skies.

His job's the most important if you really want to know, 'cause he's the one who'll bring me down when that building starts to go. That just leaves two to hit the roof and ventilate the smoke, 'cause fighting fire you can't see or find, just ain't no joke.

It's because we're so shorthanded why we work many extra days and our families only see us through a distant, smoky haze. Then we're criticised for overtime by every Tom and Bob... but we keep on fighting fires, 'cause God damn it, that's our job.

By: Ernest A Chiaradonna, Sr
Chelsea Fire Department
Chelsea, MA L937

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