

FIRE **AND** RESCUE INTERNATIONAL



Integrated fire, rescue, EMS and incident command technology

Volume 4 No 10

Official magazine of
SAESI

SOUTH AFRICA'S **BLACK HAWK**

**LEADING
EDGE AVIATION** cc



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Comment

We proudly present the 46th edition of **Fire and Rescue International (FRI)**. We trust the magazines are now filtering through to you after the extensive postal strike. Enjoy the read!



Lee Raath-Brownie

SAESI News

The SAESI News this month features SAESI President Melvin Ramlall's message, which includes a report back on SAESI's attendance of the South African Qualifications Authority's (SAQA) 12th Professional Body Forum, where the institute was presented with its certificate of registration.

SAESI also received its IFSAC certification for 70 levels of accreditation and we review the 2018 Annual Institute Council Meeting as well as Salomé van den Berg's, chief executive officer, overview from the 2017 annual report.

Cover profile

This month's edition features South Africa's first Black Hawk, which was imported by Leading Edge Aviation, to fight wildfires.

International Fire Fighter's Day 2018

We review the International Fire Fighter's Day 2018 commemorations around South Africa.

Events

We review the Securex and A-OSH 2018 exhibitions held at Gallagher Estate in Midrand at which Fire and Rescue International exhibited.

Hazardous materials - UN class 6: toxic and infectious substances

Our technical expert, Colin Deiner, discusses hazardous materials - UN class 6: toxic and infectious substances in this fifth article in our series on responding to specific classes of hazardous materials. Deiner shares how these toxic substances affect the body and the dosage ie how much will kill you. He also writes about biohazards and infectious substances and emphasises pre-planning and provides practical tactics for responding to and managing these incidents.

Rescue roundup

Neville van Rensburg and Julius Fleischman provide a review of the South African Medical Rescue Organisation (SAMRO) National Assessor Workshop held in Bloemfontein.

We are grateful to all our contributors, advertisers and readers 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

Jan Henk van Vuuren for his photograph 'Federal signal siren' taken with a Samsung. On the following settings: ISO 320, shutter speed 1/10 and an aperture/F-stop of 1,7.

Well done!

Jan Henk van Vuuren wins this months prize money of R2000!

Photo description:

The photo was taken at Sasol Secunda of their E-One Cyclone industrial pumper.

Best rescue, fire or EMS photo wins R2 000!

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

Rules

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



SAESI President Melvin Ramlall

On 27 March 2018 the Southern African Emergency Services Institute (SAESI) president and management team was fortunate to attend as newly recognised Professional Body, the South African Qualifications Authority's (SAQA) 12th Professional Body Forum. Not only was the Institute handed its certificate of registration but was exposed to

information ranging from review policy and criteria for recognising professional bodies, to recognition of prior learning (RPL) implementation presentations, funding models for professional body processes and much more.

SAQA Colloquium on Decolonisation

This brief covers the SAQA National Qualifications Framework (NQF) Colloquium, "Decolonisation and the NQF: Way Forward" and it is intended to appraise all SAESI prescribed officers of the current and relevant 'decolonisation' and 'Africanisation' debates taking place within the country and to be responsive to contribute positively in removing barriers that impact the education and training spaces.

Background

The call for a decolonised South African education and training system began in 2014 and gave rise to student protests at the universities over the issues of funding and registration.

The protests spread and translated to the removal of colonial statues at the universities and public spaces. Students rallied to join the call to end colonial influence, included a call for free post school education, reform the curricula and approach to teaching

and learning and multiple other issues relating to the transformation of the systems in South Africa.

It runs more deeply than any single emerging issue that requires an authentic process of renewal and regeneration that impacts profoundly on the content of courses, language and management of education and training that reflect the ethos of African institutions of learning (Africanisation) in a way that serves the interest and needs of people in the country.

The National Qualifications Framework (NQF) and holistic lifelong learning are potential mechanisms for the transformation and Africanisation. SAQA and the NQF community have roles to play in building trust and building bridges in the system.

Each entity has a role to play in building a harmonious and sustainable future for the good of all. As part of SAQA's commitment to sustain research that underpins and informs the NQF policy development and implementation that includes the decolonisation and indigenisation of curricula, education, training and professional development, a colloquium was held to:

- a) To understand the current 'decolonisation' debates and
- b) To develop shared notions of the implications of 'Africanisation' in the NQF context.

What is 'Africanisation'

- Learning from history
- Response to history of apartheid
- Reclaiming what belong to Africans
- Identifying within African knowledge
- Afrocentric knowledge approach
- Linked to identity, cultural ideology and worldview
- Africanise the curriculum, research, language and governance

Overview of current debates

The overview of current debates session was chaired by the



Certificate hand over to SAESI



chairperson SAQA, Dr Vuyelwa Toni Penxa of the University of South Africa (UNISA) and Prof Gatsheni. Sector presentations included:

- Education Deans Forum (EDF)
- Universities South Africa (USAF)
- South African College Principals Organisation (SACPO)
- Engineering Council of South Africa (ECSA), Cyril Vuyani Gambede
- Adult education, Shirly Walters
- Labour, Dan Khumalo, Federation of Unions of South Africa (FEDUSA)

Discussions included the conceptualisation of Africanisation or the idea of the 'Afrropolitan' and implications of 'Africanisation' or the 'Afrropolitan' for SAQA/NQF entities.

A session focussed on, "Towards shared understanding of 'Africanisation', the 'Afrropolitan' and the implications of 'Africanisation' or 'Afrropolitan' for NQF institutions" included the following presentations:

- South African Qualifications Authority's (SAQA): Joe Samuels, CEO
- UMALUSI Council for Quality Assurance in General and Further Education and Training: Emmanuel Sibanda, executive manager, Qualifications and Research
- Council on Higher Education (CHE): Dr Denyse Webbstock, director, Monitoring and Evaluating, CHE
- Quality Council for Trades and Occupations (QCTO): Thomas Lata, chief director, Occupational Qualifications,
- Department: Basic Education (DBE): Dr Aaron Nkosi, obo deputy director general, Curriculum
- The Department of Higher Education and Training (DHET): Dr Nkosinathi Sishi, deputy director general, Policy, Planning, Strategy

Way forward

It was resolved that the issues raised at the session will be considered at the next SAQA strategic planning

session scheduled on 8 to 9 March 2018 where a policy position will be developed and include a research project across NQF boundaries.

President's summary

It was realised during the discussions that these items had far reaching consequences, implications and potential that require further research.

The issues of language and its positives in early child development and limitations in access to higher learning and relevance in work spaces were amplified. The reforms of articulation across quality frameworks identified opportunities that were positive. The need for regulatory instruments in this regard from SAQA was also stressed.

SAESI prescribed officers MUST be cognisant of this current dialogue and ensure we respond by innovating and aligning our business practices in line with the SAQA policies. ⚠



SAESI receives IFSAC certification for 70 levels of accreditation



SAESI for the South African emergency services," said Geldenhuys.

accreditation system for fire-related degree programmes began.

IFSAC visited South Africa during November 2017 and SAESI submitted the 70 programmes, listed on the opposite page, to IFSAC for certification. "39 of the programmes were previously accredited while 31 are new," said Geldenhuys.

SAESI and LG SETA accredited training providers

Correct industry standard and accredited training is crucially important in the emergency services environment as up to standard training can make the difference in a life or death situation. While there are numerous companies that offer training to individuals and departments, SAESI prides itself in offering through its accredited training providers the highest National Fire Protection Association (NFPA), International Fire Service Training Association (IFSTA) and International Fire Service Accreditation Congress (IFSAC) fire and rescue training, both locally and on international standards. SAESI takes this aspect seriously and works tirelessly to inspect and ensure the training providers endorsed are accredited and performing to the highest possible standard.

Training centres can now apply for all 70, extending their scope of training dramatically.

IFSAC

The International Fire Service Accreditation Congress (IFSAC) is a not-for-profit, peer-driven, self-governing system of both fire service certifying entities and higher education fire-related degree programs. IFSAC's mission is to plan and administer a high-quality, uniformly delivered accreditation system with an international scope.

A complete list of accredited training providers is available on SAESI's website, www.saesi.com.

The Southern African Emergency Services Institute (SAESI) received its International Fire Service Accreditation Congress (IFSAC) accreditation for 70 programmes. Deputy chairperson for SAESI's Quality Assurance Working Group, Theresa Geldenhuys, attended the IFSAC Assembly Meeting in Oklahoma City in the USA on 14 April 2018 to receive this prestigious certificate in person. "This is a significant milestone achieved by

IFSAC was founded in 1990 to establish a new national accreditation system for fire service certification programs. In 1992, the development of an

NFPA Code	Description	Previous Accreditation	New Accreditation
NFPA 472 - Chapter 4	Hazmat Awareness	Yes	
NFPA 472 - Chapter 5	Hazmat Operations - Core competencies	Yes	
NFPA 472 - Chapter 6	Mission Specific - Personal Protective Equipment	Yes	
NFPA 472 - Chapter 6	Mission Specific - Mass Decontamination		Yes
NFPA 472 - Chapter 6	Mission Specific - Technical Decontamination	Yes	
NFPA 472 - Chapter 6	Mission Specific - Evidence Preservation and Sampling		Yes
NFPA 472 - Chapter 6	Mission Specific - Product Control		Yes
NFPA 472 - Chapter 6	Mission Specific - Air Monitoring and Sampling		Yes
NFPA 472 - Chapter 6	Mission Specific - Victim Recovery and Rescue		Yes
NFPA 472 - Chapter 6	Mission Specific - Illicit Laboratory Incidents		Yes
NFPA 472 - Chapter 7	Hazmat Technician - NFPA 472, Ch.7	Yes	
NFPA 1001 - Chapter 5	Fire Fighter 1	Yes	
NFPA 1001 - Chapter 6	Fire Fighter 2	Yes	
NFPA 1002 - Chapter 4	Driver Operator - General Requirements		Yes
NFPA 1002 - Chapter 5	Apparatus equipped with Fire Pump	Yes	
NFPA 1002 - Chapter 6	Apparatus equipped with an Aerial Device	Yes	
NFPA 1002 - Chapter 8	Wildland Fire Apparatus		Yes
NFPA 1002 - Chapter 9	Aircraft Rescue and Fire-Fighting Apparatus		Yes



NFPA 1002 - Chapter 10	Mobile Water Supply Apparatus		Yes
NFPA 1003 - Chapter 5	Airport Fire Fighter	Yes	
NFPA 1006 - Chapter 5	Technical Rescuer	Yes	
NFPA 1006 - Chapter 6	Rope Rescue 1	Yes	
NFPA 1006 - Chapter 6	Rope Rescue 2	Yes	
NFPA 1006 - Chapter 7	Confined Space Rescue 1	Yes	
NFPA 1006 - Chapter 7	Confined Space Rescue 2	Yes	
NFPA 1006 - Chapter 8	Trench Rescue 1	Yes	
NFPA 1006 - Chapter 8	Trench Rescue 2	Yes	
NFPA 1006 - Chapter 9	Structural Collapse 1	Yes	
NFPA 1006 - Chapter 9	Structural Collapse 2	Yes	
NFPA 1006 - Chapter 10	Vehicle Rescue 1	Yes	
NFPA 1006 - Chapter 10	Vehicle Rescue 2	Yes	
NFPA 1006 - Chapter 12	Swiftwater Rescue 1	Yes	
NFPA 1006 - Chapter 12	Swiftwater Rescue 2	Yes	
NFPA 1006 - Chapter 16	Wilderness Rescue 1	Yes	
NFPA 1006 - Chapter 16	Wilderness Rescue 2	Yes	
NFPA 1006 - Chapter 19	Machinery Rescue 1	Yes	
NFPA 1006 - Chapter 19	Machinery Rescue 2	Yes	
NFPA 1021 - Chapter 4	Fire Officer 1	Yes	
NFPA 1021 - Chapter 5	Fire Officer 2	Yes	
NFPA 1026 - Chapter 4	Incident Commander		Yes
NFPA 1026 - Chapter 5	Safety Officer		Yes
NFPA 1026 - Chapter 6	Public Information Officer		Yes
NFPA 1026 - Chapter 7	Liaison Officer		Yes
NFPA 1026 - Chapter 8	Operations Section Chief		Yes
NFPA 1026 - Chapter 11	Operations Division/Group Supervisor		Yes
NFPA 1026 - Chapter 12	Strike Team/Task Force Leader		Yes
NFPA 1026 - Chapter 15	Air Tactical Group Supervisor		Yes
NFPA 1026 - Chapter 16	Planning Section Chief		Yes
NFPA 1026 - Chapter 17	Resources Unit Leader		Yes
NFPA 1026 - Chapter 18	Situation Unit Leader		Yes
NFPA 1026 - Chapter 21	Logistics Section Chief		Yes
NFPA 1031 - Chapter 4	Fire Inspector 1		Yes
NFPA 1031 - Chapter 5	Fire Inspector 2		Yes
NFPA 1031 - Chapter 6	Fire Inspector 3		Yes
NFPA 1031 - Chapter 7	Plans Examiner 1		Yes
NFPA 1031 - Chapter 8	Plans Examiner 2		Yes
NFPA 1033 - Chapter 4	Fire Investigator	Yes	
NFPA 1035 - Chapter 4	Fire and Life Safety Educator 1	Yes	
NFPA 1035 - Chapter 5	Fire and Life Safety Educator 2	Yes	
NFPA 1035 - Chapter 7	Public Information Officer	Yes	
NFPA 1041 - Chapter 4	Instructor 1	Yes	
NFPA 1041 - Chapter 5	Instructor 2	Yes	
NFPA 1051 - Chapter 4	Wildland Fire Fighter 1	Yes	
NFPA 1051 - Chapter 5	Wildland Fire Fighter 2	Yes	
NFPA 1051 - Chapter 6	Wildland Fire Officer 1		Yes
NFPA 1051 - Chapter 7	Wildland Fire Officer 2		Yes
NFPA 1081 - Chapter 5	Incipient Industrial Fire Brigade Member	Yes	
NFPA 1081 - Chapter 6	Advanced Exterior Industrial Fire Brigade Member	Yes	
NFPA 1081 - Chapter 7	Interior Structural Industrial Fire Brigade Member	Yes	
NFPA 1081 - Chapter 8	Industrial Fire Brigade Leader	Yes	



SAESI holds 2018 Annual Institute Council Meeting

The Southern African Institute of Emergency Services (SAESI) held its 2018 Annual Institute Council Meeting on Friday, 25 May 2018 at SAESI House in Monument, Krugersdorp.

SAESI president, Melvin Ramlall, welcomed all members and guests and the traditional necrology and a moment of silence was observed in commemoration of those members who lost their lives since the previous council meeting.

- Mr EO Mmogoe, Bojanala Platinum District, Greater Northern Branch
- Mr JM Selepe, Makhado, Greater Northern Branch
- Mr GA Gradwell, Durban, KZN Coastal Branch
- Mr LM Nhleko, Ballito, KZN Coastal Branch
- Mr N Netshlombo, Zonkizezwe Fire, Eastern Gauteng Branch
- Mr AD Masuku, Brakpan Fire, Eastern Gauteng Branch
- Mr PN Motsete, Frankfort Fire, Free State Branch
- Ms CP Kruger, Cape Town, Cape Peninsula Branch
- Mr RT Oliphant, Belville Fire, Cape Peninsula Branch

Awards

Service awards for 30 and 40 Year Continued Membership was awarded as well as Fellow Membership Awards to Arlene Wehr, Dino Levendal and Etienne van Bergen of the Cape Peninsula branch.

30 Year Continued Membership Awards

- WA Sternsdorf, Cape Peninsula
- PP Myburgh, Cape Peninsula
- PA Smidt, Cape Peninsula
- LW Damons, Cape Peninsula
- MA Smith, Cape Peninsula
- AP Davis, Cape Peninsula
- RW Cozett, Cape Peninsula
- A Africa, Cape Peninsula
- OB Stuurman, Cape Peninsula
- E van Bergen, Cape Peninsula
- NA de Kock, Cape Peninsula
- CADJ Cairncross, Cape Peninsula
- MJ Bosch, Cape Peninsula
- CS Woolstencroft, Cape Peninsula
- CB Schoeman, Cape Peninsula
- GG Carolissen, Cape Peninsula
- BA Alers, Cape Peninsula
- NW Khumalo, KZN Coastal
- MG Koitsoe, Greater Northern
- HM Bester, Southern Cape
- WM Monegi, Greater Northern
- RF Fourie, KZN Coastal
- WT Jonathan, Eastern Cape
- HD Maschaka, Eastern Cape
- OS Masibi, Eastern Gauteng
- G Moodley, KZN Coastal
- V Nagappen, KZN Coastal
- NG Plaatjies, Eastern Cape
- RG Shand, KZN Coastal
- MC Smith, Eastern Cape
- G Soobramoney, KZN Coastal
- MA van der Walt, KZN Coastal
- VG Davies, Eastern Cape
- VA Govender, KZN Coastal
- FJ Kritzing, Free State
- DS Makhina, Free State
- P Mothiram, KZN Coastal
- NSA Sayed, KZN Coastal

- A Naidoo, KZN Coastal
- MJ Townsend, KZN Coastal
- GH Gordon, Free State
- JC van Tonder, Free State
- C Young, KZN Coastal
- A Oortman, Eastern Cape
- M Barnard, Southern Cape
- WR Hendricks, Eastern Cape
- J Smit, Free State
- AS Swardling, KZN Coastal
- MN van der Walt, Free State
- ML Chili, KZN Coastal
- S Ebrahim, KZN Coastal
- PD Fry, Eastern Cape
- KR Riddin, Eastern Cape
- O Joseph, Eastern Cape
- RH Clemence, Eastern Cape
- G Ramnanan, KZN Coastal
- A Devnarrian, KZN Coastal
- S Naidoo, KZN Coastal
- M Moodley, KZN Coastal
- AR Artman, Eastern Cape
- WA Felkers, Eastern Cape
- RK Mabelane, Eastern Gauteng
- MJ van der Mescht, Southern Cape
- SW Petzer, KZN Coastal
- DA Barnard, Eastern Cape
- MS Mushabane, Greater Northern
- AT Counihan, KZN Coastal
- SP Rametsi, Greater Northern
- EB Mfolwe, Greater Northern
- JH Mostert, KZN Coastal
- JD Aaron, Southern Cape
- TE Dlamini, West Vaal
- WL Prince, Eastern Cape
- TW Wiese, KZN Coastal
- MS Minnie, Eastern Cape
- AH Nortje, Mpumalanga
- M Paul, KZN Coastal



40 Year Continued Membership Awards

- GG Carolissen, Cape Peninsula
- JS Erickson, Cape Peninsula
- BA Alers, Cape Peninsula
- NAP Vikery, KZN Coastal
- BJ Allen, KZN Coastal
- C Lamprecht, Free State
- RD Jones, KZN Coastal
- JM van der Westhuizen, Free State
- JF Moller, Free State
- T Govender, KZN Coastal
- DG Lavarack, KZN Coastal
- GJS Schoeman, Southern Cape
- FA Gerber, Greater Northern
- WJ Schroeder, Eastern Gauteng
- GD Cilliers, Southern Cape

Fellow Membership Awards

- AF Wehr, Cape Peninsula
- D Levendal, Cape Peninsula
- E Van Bergen, Cape Peninsula

President Ramlall thanked SAESI CEO, Salomé van den Berg and the head office staff for their dedication and hard work over the past year.

He also provided an overview of the current status of the SAESI examinations and the distance learning programme.

Past president, Dino Padayachee, shared SAESI's vision, mission and values and provided a brief overview of the institute's organisational structure. Padayachee also shared the institute's performance for the past year and provided reviews of the various working groups' performance.

Riaan Janse van Vuuren presented the institute's financials and explained the financial process in practice in compliance with international standards. Janse van Vuuren also detailed the deliverables and risks faced by the institute in a changing environment and presented the way forward.

SAESI's Five-Year Plan was presented by President Ramlall, which included the institutes legislative

and policy mandates, situational analysis, external, performance and organisational environment and descriptions of the strategic planning process and approach. Ramlall shared the strategic outcome-orientated goals of SAESI, which include:

1. Develop quality education systems that promotes lifelong learning
2. Industry Innovation to strengthen science and technology
3. Equip societies to transform themselves to eradicate poverty
4. Foster universal access to information through increasing access to ICTs
5. Create employment opportunities and solutions in different fields

Tinus Pretorius provided feedback of the recently attained International Fire Service Accreditation Congress (IFSAC) Certification and said that Theresa Geldenhuys attended the certification ceremony in the USA on behalf of SAESI.







SAESI chief executive officer's overview from 2017 annual report

It is evident that SAESI has had a momentous year. SAESI has realised a large amount of its objectives stemming from previous periods strategies and objectives having been put in motion and coming to fruition. Having met these goals and achievements has laid the foundation for the successes achieved and elevated the recognition of SAESI across the fire and emergency landscape.

Notwithstanding the internal challenges of adjustment from a historic, well established organisation from 1959 to a very new company still attempting to master the prescribes and readjust and realign SAESI as a company, the strides made in this regard is in large part due to management support and the SAESI Board's bold decision upon establishment to be a developmental Board taking bold steps to perform on the ongoing objectives and good governance framework. This developmental approach is imperative to advance and to advocate, collaborate and participate whilst maintaining independence to aspire to the stakeholder expectations in order to improve our services to all people of South Africa.

I am therefore pleased to report that the Board appointed independent directors as well as established two legislative subcommittees namely the Audit and Risk Committee and the Nominations Committee with independent chairpersons. The Board is committed to build on this and expand to adhere to all requirements of the Companies Act, especially the governance of a non-profit organisation.

The Board met on five occasions both as a full sitting, as well as strategic sessions and plenary sessions during the period. Board members, however, have individually represented the Board outside of chambers on many platforms and stakeholder engagements.

As CEO, it is indeed a privilege to be part of this level of commitment and professionalism on behalf of SAESI, its executive and members.

SAESI has during the period embraced the challenges and opportunities put before the company from a social justice, environmental sustainability and diversity perspective, being sensitive of the demand by socio economic and political environments.



SAESI CEO Salomé van den Berg

I take this opportunity to sincerely thank my staff, fellow board members, the executive, all prescribed officers and members for their continued commitment, diligence, support and professionalism.

Even though much more needs to be done, it will be achieved through the continued commitment and enthusiasm ensuring we keep moving forward in the right direction. ▲

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SOUTH AFRICA

History made: South Africa's first Black Hawk fights wildfires



History was made for Africa when the first ever Sikorsky UH-60 Blackhawk arrived in South Africa, making it only the second one in history to enter civilian service outside the United States. A dream come true for Mark Jackson, owner of locally-based Leading Edge Aviation situated at Nelspruit Airfield, took delivery of the Black Hawk after a lengthy process.

The process of acquiring this US Army Special Forces aircraft began in August 2016 when Jackson bought the Black Hawk and started the long process of importing it to South Africa. The Black Hawk has a very modern design to it, with many new safety features and it is still being produced in the US. "The Black Hawk will complement our fire fighting fleet, such as the Hueys, that we are currently using in fire fighting operations. It can reach speeds of up to 300 kilometres per hour and lift three tons of water per drop, where the Hueys are currently doing one ton," said Jackson.

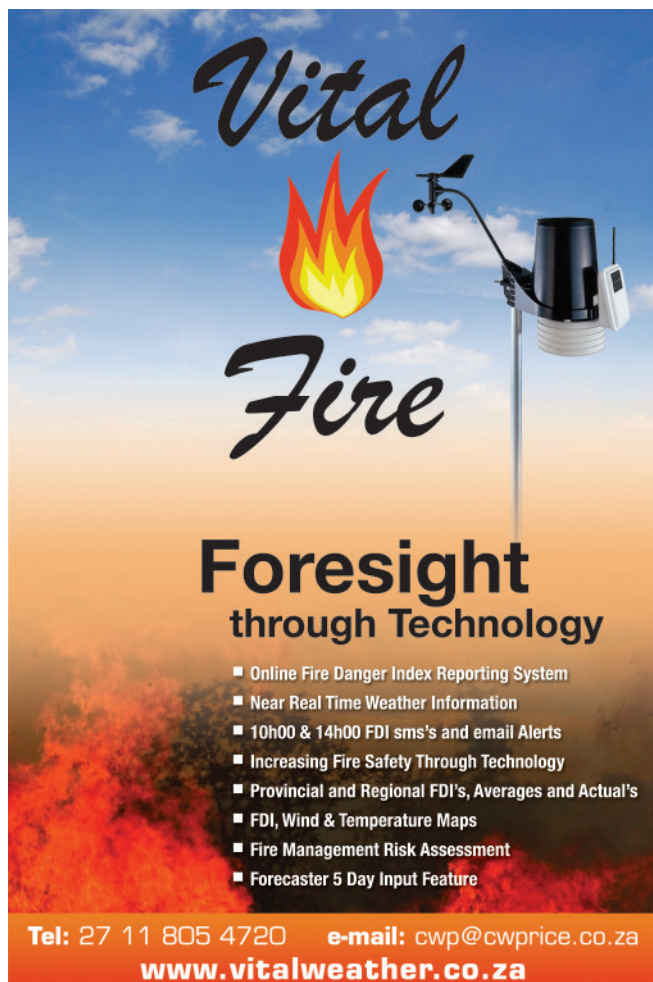
The battle to contain wildfires across Southern Africa is an annual challenge to which helicopters are ideally suited. Both the Huey and the Black Hawk compliment the other aerial fire fighting assets such as ground teams, fire bombers and other helicopters to save property and valuable assets from the destruction wrought by run-away fires.

The Black Hawk UH-60 first entered service with the US Military in 1978 and has a maximum speed 150 knots and a sling capacity of 4 000 kilograms. The typical configuration for the Huey is a 1 000 litre bucket while the Black Hawk is capable of up to 3 000 litres. Carrying capacities for all aircraft vary with temperature, wind, elevation and humidity but the Leading Edge team has what it takes to get the fire bosses the best assistance the industry has to offer.

Leading Edge Aviation is a family run business established in Nelspruit, South Africa in 1996. Leading Edge Aviation specialises in fire fighting and heavy lift helicopter operations utilising UH-1H and UH-60A helicopters. In addition to this, Leading Edge is a South African Civil Aviation Authority (SACAA) approved facility for all aircraft refurbishment and upholstery requirements.

A big first in so many ways for aviation and fire fighting in South Africa!

Photography: Adrian Munro 



**Vital
Fire**

**Foresight
through Technology**

- Online Fire Danger Index Reporting System
- Near Real Time Weather Information
- 10h00 & 14h00 FDI sms's and email Alerts
- Increasing Fire Safety Through Technology
- Provincial and Regional FDI's, Averages and Actual's
- FDI, Wind & Temperature Maps
- Fire Management Risk Assessment
- Forecaster 5 Day Input Feature

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Western Cape Province commemorates International Fire Fighters' Day in George

Acting Mayor Charlotte Clarke briefly joined the Western Cape Fire Chiefs' Committee meeting

The Western Cape Province commemorated International Fire Fighters' Day (IFFD) in George this year with a number of fire departments taking part. The event was preceded by the Western Cape Province Chief Fire Officers' Committee meeting held at the Badger Conference Centre in George followed by a vehicle motorcade and march through the town on Friday, 4 May 2018. An elegant gala dinner was held at the Oubaai Hotel Ballroom on Friday evening. Fire brigades from the Western Cape also had the opportunity of entering their teams into a friendly challenge on Saturday, 5 May 2018, which took place at the Garden Route Mall in George alongside an extrication demonstration, a drill parade and a potjiekos competition.

Chief Fire Officers' Committee meeting

Acting Mayor Charlotte Clarke met with the Western Cape chief fire officer's at the start of their three-monthly meeting. She welcomed all to George and thanked the fire chiefs for their invaluable contribution to public safety. The meeting, chaired by CFO Joseph Johnston of Mossel Bay Fire and Rescue, discussed issues pertinent to the Western Cape fire brigades and included fire chiefs from Airports Company South Africa (ACSA), Etienne du Toit of Western Cape Province and Godiraone Lloyd Phetlhu, manager: Fire Services Coordination at the National Disaster Management Centre (NDMC).

IFFD parade

George was the host for the Western Cape's IFFD 2018 and the traditional motorcade of fire engines, rescue units, tankers, EMS and related vehicles proceeded through York Street in George to the George Civic Centre, where Acting Mayor Charlotte Clarke received a trophy in commemoration of IFFD. She spent some time with the fire chiefs, fire fighters, cadets and rescue and EMS personnel, talking to them about their profession and industry. A cadet drill march led the motorcade joined by the Pakelsdorp Skool orchestra.

Gala dinner

Friday evening saw an elegant gala dinner held at the Oubaai Hotel Ballroom where the fire departments were joined by sponsor Oakhurst Insurance Company Limited's managing executive, Peter Grindlay and Mayor Memory Booysen of Eden District Municipality and Mayor Charlotte Clarke and speaker Gerrit Pretorius of George Municipality. Chaplain Mark Robson played the bagpipes and opened the evening with a prayer. Western Cape Province's Colin Deiner, Etienne du Toit and Rodney Eksteen was also in attendance with Deiner providing the history of St Florian, patron saint of fire fighters and the challenges faced by the fire fighters on a daily basis. Eksteen was MC for the evening and reminded all that fire is everyone's fight, that Government cannot do it all and that each one has a role to play. He also thanked Oakhurst Insurance for their





sponsorship. Du Toit thanked the sponsors, although he thanked the fire fighters first as well as their families for the support provided when dealing with the emotional side of the job. Grindlay said that it shouldn't take disasters to highlight the dedication and plight of the emergency services and that the public shouldn't take their service for granted. Entertainment included Eden Fire's Emile Conrad on the saxophone with Wilton Oktober of the WJ Oktober band.

Public demonstration, challenges and potjiekos competition

The IFFD event commemorated the deaths of fire fighters who lost their lives in the line of duty and honoured those who continued to fight the good fight. Saturday, 5 May 2018 saw the traditional ringing of the bell, honouring the fallen. Two families, who lost their loved ones during the past fire season was present and received certificates in their honour. The occasion was respectful, solemn and although heart breaking and emotional, also thought provoking.

Cape Winelands' Heinrich Louw led the impressive drill, providing insight into the discipline still present in our fire brigades.

The teams took part in multidisciplinary obstacle course challenge, which included getting dressed in bunker gear and SCBAs, carrying the dummy in a stretcher, the Kaiser Force machine, hose roll and throw, confined space crawl, truck tyre flip and finishing with a charged hosed drag and spraying the target (a traffic cone) to tip it over. The challenge was won by Eden District Fire Department's

Speed Team. The only all-women team competing in the obstacle course challenge was Overberg Fire and Rescue.

Heinrich Louw managed to challenge the fire chiefs in attendance and with the challenge accepted (they actually didn't have a choice) the chiefs teamed up and performed the hose throw and roll to the amusement of the fire fighters.

The George Fire Department teamed up with Metro Rescue and provided an insightful vehicle extrication demonstration for the public.

The potjiekos competition saw three municipalities challenging each other with the result being donated to charity. The winner of the potjiekos competition was George Fire Department.

Results		
1	Eden Speed Team	6:28.56
2	Raging Bulls Overberg	7:20.18
3	Overstrand	7:22.44
4	Stellenbosch	7:30.84
5	Drakenstein	7:54.80
6	Eden Team	8:15.81
7	ACSA George	8:17.31
8	Mossel Bay	8:58.12
9	ACSA Cape Town	10:44.81
10	George Fire	12:34.62
11	Fire Flies (Ladies)	15:47.90









Midvaal Fire Department commemorates International Fire Fighters' Day on 4 May




By Tertius Engelbrecht, Midvaal Fire Department

Photo credit: Corlene Venter

International Fire Fighters' Day (IFFD) is a time where the world's community can recognise and honour the sacrifices that fire fighters make to ensure that their communities and environment are as safe as possible. The event hosted by Midvaal Local Municipality,

commenced at 9h00 at Midvaal Municipality's head office in Mitchell Street, Meyerton, with an opening by chief fire officer, Hannes Steyn. A minute of silence to honour all fallen heroes was observed and a prayer was delivered by chaplain, Gerhard Oosthuizen. A squad drill was

performed by Midvaal fire fighters, followed by a parade through the streets of Meyerton proceeding to Midvaal Fire Station. At the station, the drill squad performed another drill and after that everyone enjoyed a few refreshments after a successful day as Proud Fire Fighters of Midvaal. 



Gauteng CoGTA holds IFFD commemoration on the West Rand, South Africa



The Gauteng Department of Cooperative Governance and Traditional Affairs (CoGTA) commemorated International Fire Fighters' Day at Greenhills Stadium in Randfontein on Friday, 4 May 2018, to honour the men and women who risk their lives to rescue others. The event was jointly hosted by West Rand District Municipality (WRDM) and started out with a squad drill of West Rand District Municipality fire fighters alongside a Working on Fire team from Gauteng. The squad was inspected by Nico Kahts, head of emergency services for WRDM. The South African Police Service (SAPS) Brass Band played the South African National Anthem, while everyone in uniform saluted respectfully. Gauteng CoGTA's Public Information, Education and Relations


(PIER) division was well represented and took the opportunity to promote fire safety. They displayed an unsafe situation in their gazebo, with posters intended to advise the public on avoiding dangerous situations.

WRDM traffic chief, General Kenny Mamphondo, read from Exodus Chapter three, the verses relating to Moses and the burning bush, which was not destroyed by fire. An official welcome address was given by WRDM emergency services manager, Elias Kolozi. He welcomed all guests, dignitaries and visitors to the West Rand, emphasising the proximity to the Cradle of Humankind. He joked, "Welcome home! Every person in the world has their origins in the West Rand." On a more serious note though, he spoke

about the essential responsibilities of all fire fighters and leaders as role models in the community.

City of Tshwane deputy chief and director of training, Peter Motolla, explained the purpose of the day, reminding all in attendance of the origins and relevance of International Fire Fighters' Day. Motolla said it is important to be proud of your profession.

The programme director for the day, Sam Sibande, head of department for Ekurhuleni Emergency Management Services, announced the protocols for the bell ringing ceremony. He stressed the importance of family above all other things, including the family of fire fighters. The Brotherhood, WRDM regional commander, Bongani Momosa, rang the bell solemnly and wreaths were laid in front of the podium. Roland Hendricks, director for fire services at Gauteng CoGTA, gave the keynote address on behalf of Dr Elias Sithole. He focussed on thanking all fire fighters and first line responders for their contribution. Hendricks thanked all parents of fire fighters for sharing their sons and daughters with us.

A vote of thanks ended the official programme. This was given by the fire chief of nearby Lesedi Local Municipality, Clement Masinge. He said that fire fighters are a rock of stability for our communities when disaster strikes. A buffet lunch concluded the event. 





Johannesburg Emergency Management Services commemorates Fire Fighters Day at Florida Park

The City of Johannesburg Emergency Management Services (CoJEMS) commemorated International Fire Fighters' Day 2018 at its Florida Park Fire Station on 16 May 2018. The event started with a march by and flag raising ceremony under the accompaniment of the Johannesburg Metro Police Department (JMPD) Brass Band followed by a moment of silence and a moving prayer by Chief Chaplin Ngwenya.

CoJEMS acting executive head, Mhlengi Makhubalo; chief for the Johannesburg Metro Police Department (JMPD), David Tembe; Godiraone Lloyd Phetlhu, manager: Fire Services Coordination at the National Disaster Management Centre (NDMC); director of Proactive Service, Arthur Mqwa; together with the MMC of Public Safety, Cllr Michael Sun, Cllr Hilton Masera, the chairperson of Section 79 (Public Safety Committee) and Cllr Oupa Tolo, head of the Safety Cluster were in attendance to honour the fire fighters, EMS and JMPD officers



who lost their lives in the line of duty as well as the past and present first responders who continue to risk their lives in order to save the lives of others.

Chief Makhubalo said that fire fighters dedicate their lives to the protection of lives and properties and that sometimes that dedication is in the form of countless hours volunteered

over many years; in others it is selfless years spent working in the industry and in some cases the ultimate sacrifice of fire fighter's life. Chief Makhubalo performed the necrology by ringing the last bell after the reading of the names of the fire fighters that had passed on during the past year:

- Fire fighter K Joubert
- Fire fighter B Slone



International Fire Fighters' Day

celebrations in Bitou Local Municipality




Bitou Municipality's Directorate of Community Services recently celebrated International Fire Fighters' Day 2018, bringing their fire and rescue section of public safety together with fire management units (FMUs) and the volunteers from the Greater Plettenberg Bay area.

The commemoration opened with a moment of silence before the vehicles started up and sounded sirens. The various role players together with municipal fire and rescue services held a 'fun day, demonstrating fire department vehicles, equipment and operations

to the public. Chief fire officer, Hedley Venter, addressed the public and provided information regarding the fire and rescue service.

A vehicle extrication was included to demonstrate a rescue scenario; the same vehicle was later set alight and used to demonstrate how a car fire is extinguished.

The day was well supported by the community, who were also given an opportunity to see what resources are available in the region. Kids particularly enjoyed the 'portable pool' and water streams, as well as the foam splash area.

Next year the Bitou Municipality plans to do something similar and to expand the event into a fundraising campaign for the benefit of the associated FMUs. 



- Fire fighter P Sidimela
- Fire fighter D Zwane
- Fire fighter M Letsosa
- Acting station commander L Mphatswe
- Fire fighter T Thobodi
- Station commander J Steenkamp.

In his presentation, Cllr Michael Sun said that people are fascinated by the super heroes such as Batman, Spiderman and the latest craze, the Black Panther but that first responders are actually super heroes as they fight what we fear and rescue the public in their hour of need.


Programme director for the event, Tshelo Setlako, division commander:

operations, reminded all to vote for the CoJEMS team, Jocelin Flank and Deon Esau, who have been nominated for the Integrity Idols awards.

Cllr Hilton Masera said that the focus of the event is on the first responders and fire fighters and that it is unfortunate that we only highlight their service on sad days.

Three station commanders read out poems, honouring those who serve so selflessly. The fire fighters in attendance also took the Fire Fighters' Pledge. Although a solemn ceremony, the fire fighters had a chance to dance in celebration of the lives of those they served with.

Why 16 May?

On the 16 May 2015 at about 19h44 there was a structural fire incident reported in the Inner city Nedbank building, Albertina Sisulu Street, Johannesburg CBD. On arrival, the first crew found dark smoke coming out from the parking basement of Nedbank Mall at Albertina Sisulu. During the deployment of the crews, a breathing apparatus (BA) team led by the incident commander became fragmented, with individual members becoming disorientated and lost. The incident commander managed to find his way out of the building but the two colleagues unfortunately lost their lives. 



International Fire Fighters' Day commemorated in Tzaneen



The Letaba Fire Protection Association (LFPA) in Tzaneen organised an International Fire Fighters' Day event for all its members, the Mopani Fire Services, ER24, EMS, Working on Fire and other local emergency providers.

The day kicked off with a parade through the streets of Tzaneen. There were 42 vehicles in the convoy, including four bikes, 15 bakkies with skid units, 11 emergency response vehicles and ambulances, 12 fire engines and about 120 people.

Kobus Visser, Mopani Fire Services' chief, rode his unique motorcycle

and participated in the parade alongside the members of the Letaba Fire Protection Association's skid units, on the back of their vehicles and the LFPA's incident command system trailer. The parade ended at the local primary school where a fire fighter read the Fireman's Prayer. The fire services performed a wet fire drill, which the learners absolutely loved.

Then the Mopani Fire Services, together with EMS and ER24, did an extraction demonstration, showcasing their capabilities. Four Working on Fire high altitude teams participated in the International Fire Fighters' Day celebration in Tzaneen.

The Letaba Fire Protection Association's big dream was to have a photo with as many vehicles as possible. With hard work they managed to gather a total of 42 vehicles for a photo to celebrate International Fire Fighters' Day in Tzaneen.

The day ended with the learners of Tzaneen Primary School handing out personalised cards with a treat sponsored by the Letaba Fire Protection Association. They handed out certificates of appreciation to all the fire fighters to commemorate International Fire Fighters' Day.

Photo credits:
Joe Dreyer and BFM Productions 🚒



Full-scale twelve dwelling informal settlement fire test conducted at Breede Valley

By Dr Richard Walls, senior lecturer, Structural Engineering Division, Fire Engineering Research Unit, Stellenbosch University



Figure 1 Fire spreading between dwellings



On 24 May 2018, what is possibly the world's largest informal settlement fire experiment was conducted as a combined research effort between the Breede Valley Municipality Fire Department (BVFD), the Western Cape Department of Local Government Disaster Management and Fire and Rescue Services, Stellenbosch University (SU) and the University of Edinburgh (UoE).

Twelve informal settlement dwellings or 'shacks' were burnt down and these dwellings contained approximately five ton of wood for fuel. The research has been conducted to provide insight into how fire spreads between informal dwellings, temperature experienced, safety distances, heat fluxes, methods for validating safety interventions to be used in informal settlements and similar such details.

The research team is busy analysing the data but useful information will be coming from the many instruments, cameras and thermocouples used to capture experimental data. Temperatures over 1 100 degrees Celsius have been measured and flames of up to around five metres high were observed. Due to the wind speed and direction, a few dwellings did not initially catch fire and this has provided useful insight into when dwellings do and don't burn. The testing has also provided insight into what a suppression system or passive protection product, may have to withstand if utilised in informal settlements.

This test had a relatively simple layout, structures and fuel load. Future tests, which will be on an even larger scale, will have more complex geometries and building types to show the influence of such parameters. The work forms part of

the IRIS-Fire project, which is a research effort by Stellenbosch University and the University of Edinburgh to understand and improve informal settlement fire safety. Other components of the IRIS-Fire project consist of mapping previous large-scale fires (a fire spread analysis of the 2017 Imizamo Yethu fire will be released soon), GIS mapping, testing of interventions, social science surveys in communities, development of computer simulation models and much more.

The research team would like to thank the Breede Valley Municipality, Western Cape Local Government, EPSRC Global Challenges Research Fund of the UK and the various other organisations who assisted in making this ongoing project possible. ▲

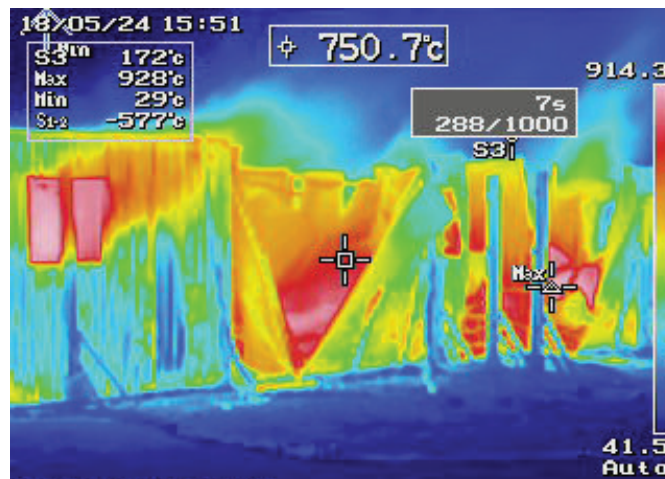


Figure 2: Informal dwellings on fire (left) with a thermal infra-red image (right) showing temperatures observed



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Securex and A-OSH 2018



Fire and Rescue International exhibited at A-OSH 2018, which was held from 22 to 24 May 2018. A-OSH is co-located with the security exhibition, Securex South Africa 2018, which celebrated its 25th anniversary this year, drawing in 10 482 visitors across the two shows over three days. The Fire Protection of South Africa's (FPASA's) InFIREs Conference, which focused on water scarcity, ran concurrent with the two expos at Gallagher Estate in Midrand.

Securex alone attracted 7 129 attendees from 46 different countries, including 20 countries within the African region. The best-represented African countries included Botswana, Zimbabwe, Mozambique, Namibia and Ghana. These countries contributed 58,8 percent of the show's international visitors.

Aside from the show's popular free-to-attend seminar theatre, which

featured more than 20 new topical sessions, Securex 2018 saw the launch of its inaugural Cyber Lab, powered by XGRC Software, in a nod to industry development. The Cyber Lab covered additional focused content on topics such as social engineering, the legal implications of information security and encrypted communication, while giving real-time demonstrations on hacking.

A-OSH focussed on health and safety issues in industry with a large number of exhibitors focusing on personal protective equipment (PPE) such as helmets, gloves, eye and ear protection, safety boots and weather proof and high-visibility jackets. Prefabricated Access Suppliers' and Manufacturers' Association (PASMA's) Working at Height seminar programme offered presentations and live demonstrations.

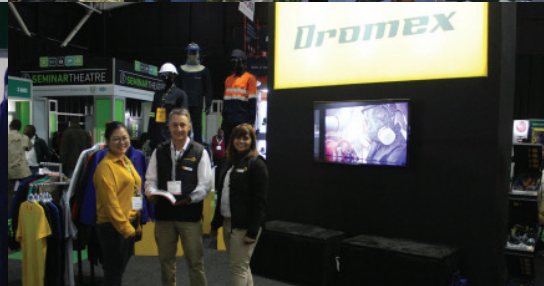
Visitors were also able to witness canine handling demonstrations first-hand by

Pseudo Scent and Dogs SA as well as the South African Intruder Detection Services Association (SAIDSA) Techman competition and see the new product display showcasing the latest in security products.

A number of industry associations also exhibited such as South African Institute of Occupational Safety and Health (SAIOSH), South African Institute for Working at Height, National Examination Board in Occupational Safety and Health (NEBOSH), Master Builders South Africa (MBSA), Southern African Protective Equipment Marketing Association (SAPEMA), FPASA, Guide Dogs Association South Africa, Ergonomics Society of South Africa, Institute of Safety Management (IOSM) and The Southern African Institute for Occupational Hygiene (SAIOH).

Securex 2019 will take place from 14 to 16 May 2019 at the Gallagher Convention Centre. ▲





Hazardous materials - UN class 6: toxic and infectious substances

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



If you have no way of detecting the presence of hazardous materials on your hazmat rig, it's not a hazmat rig

In this month's article, we continue our series on hazardous materials. We will deal with toxic and infectious substances.

These are substances that are liable to cause death or injury if inhaled, swallowed or absorbed through skin contact. Within UN Class 6 toxic and infectious substances are divided into two classes:

Toxic substances – The UN defines a toxic substance as “a poisonous material, other than a gas, known to be so toxic to humans that it presents a health hazard during transportation”.

Infectious substances – Is defined as “a material known to contain or suspected of containing a pathogen”. A pathogen is a virus, micro-organism or proteinaceous infectious article that has the potential to cause disease in humans or animals.

Toxic substances

Toxic substances affect the body at the cellular level; they will either destroy cells, slow down their functioning or affect the cells to such an extent that they go out of control and form tumours or cancers (this can take several years to develop).

When these chemicals reach certain sensitive parts of the body at specific concentrations for a certain period of time, they can cause enough harm to kill or seriously harm that body. These chemicals can enter the body in four different ways.

1. Inhalation

Generally, gasses and vapours can be the easiest to be inhaled but, depending on their size and shape, mists, dust, fibres and smoke can also be absorbed this way. The decisive factor here is the size and shape of

the particles. While smaller particles will penetrate the lower respiratory tract, larger particles tend to get stuck in the upper respiratory tract and could eventually relocate to the oesophagus. From the oesophagus where it can move through the intestines and present the same toxic effect as substances that have been ingested. Inhaled dust may enter the gastro-intestinal tract directly and affect the micro-organisms located there or cause chemical imbalances that could be harmful. Asbestos fibres and manmade mineral fibres can cause fibrosis or cancer while insoluble particles such as coal and silica can lead to lung fibrosis.

The volume of air inhaled and exhaled obviously increases with physical exertion. This means that a person could inhale more harmful products ▶

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- "Snug Fit" - The unique design which tapers over the ankle area of the shaft to create a form fitting supportive boot that provides a tighter fit to prevent ankle roll over and foot fatigue



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Key Features

Viking VW91

- **Kevlar lined to provide three times the NFPA requirements for conductive heat resistance and double the shaft cut resistance**
- Steel toe and Mid-Sole
- Electric shock resistance 18kV
- Flame retardant rubber upper
- Reinforced backstay for heel tendon protection
- Metatarsal and Shin Impact Protection through multiple layers of Kevlar, Ballistic Nylon and rubber
- Instep and leg lined with multiple layer of ballistic nylon
- Ankle padding protection and foam midleg padding for additional support
- Viking NGV outsole-abrasion, chemical and slip resistant nitrile outsole
- Heavy Duty rubber pull straps
- Blood-borne pathogens viral protective upper

Hazardous materials

- ▶ in a toxic environment if they are involved in a more strenuous atmosphere.

2. Ingestion

This occurs when substances enter the system through the gastro-intestinal tract. It normally happens by accident although poor operational discipline such as consuming food in the vicinity of the substance, can also be a cause. The physical state, such as the water solubility of the product will generally determine the ease at which the substance can be absorbed.

3. Dermal absorption

Certain substances have the physical and chemical properties, which allow them to be absorbed through the skin. Liquid products such as methanol, organic mercury compounds, organophosphate pesticides and benzene are examples of such products. These substances can also enter the body through cuts and abrasions and it is therefore important that such, even superficial injuries, must be sufficiently protected in a hazardous material environment.

4. Injection

As the word says, this is when a substance is directly introduced into the system by means of a puncture wound. This can happen either by a direct injection, from an animal (dog bite) or reptile (snake bite) or from a cut caused by a sharp object. These wounds have the potential of introducing the substance directly into the blood stream.

Dosage: How much will kill you?

Certain substances that may not necessarily be poisonous could in certain higher concentrations cause severe damage usually resulting in acute effects. The toxicity of the substance is therefore not the only factor to consider when determining the exposure risk. The duration of the exposure and physical properties of the substance such as its size and texture, affinity for human tissue and solubility with human tissue fluid, will be important. The physical state of the 'victim' such as age, health state and



Certain substances that may not necessarily be poisonous, could in certain higher concentrations cause severe damage usually resulting in acute effects

sensitivity of the human organs and tissue to the product, will also determine the effectiveness of the product.

In order to ensure protection of persons working in potentially hazardous environments, legislation has been developed to manage the occupational exposure limits of workers in a particular environment. This is calculated by determining to what level a worker will be exposed to a harmful substance over the course of a normal working day. The control levels for gasses, vapours and other airborne particle are measured in 'parts per million' (ppm) by volume or parts of gas per million parts of air. Dusts, smoke or fumes are calculated as milligrams per cubic metre (mg/m³) of air at standard temperature and air pressure. While workplace exposure limits are meant to indicate the maximum allowable safe working period in a potentially hazardous atmosphere, they do not cover emergency situations. An accidental release of a hazardous product in a (otherwise) controlled environment, will in all probability increase the concentrations thereof to limits that are technically described as 'immediately dangerous to life and health' (IDLH) or reach what can furthermore be described as reaching a 'lethal dose'. It is unfortunately here where the boys and girls of the emergency services will have to make it their problem.

Biohazards and infectious substances

A biohazard (biological hazard) is any microorganism, cell culture or human endoparasite that can cause infection, allergy, toxicity or any other harm to human health. They are formed by exposure to a range of pathogenic or disease causing organisms. Acute or chronic infectious diseases may be caused by bacteria, viruses, protozoa or fungi. As with toxic substances these pathogens enter the body through a variety of ways including direct skin contact, puncture wounds, cuts, inhalation and ingestion of contaminated foodstuffs or liquids. They are found in a huge range of locations and it is when they reach their 'toxic dose level' that they become a

major health and life risk. Some of the more common locations of biohazards include hospitals (mortuaries, quarantine areas, laboratories), university laboratories, veterinary laboratories, farms, zoos, sewage treatment installations, postal service facilities and pharmaceutical businesses.

Due to the high levels of risk associated with these materials, a high level of security is normally involved in their locations. These include the electronic control of unauthorised personnel and automatic locking mechanisms. In high level risk facilities, a negative internal pressure is maintained in order to prevent the release of biological agents to the outside. These types of premises are usually located above ground. They also generally have an uninterrupted power supply and there may be certain radiation systems on site to perform sterilisation processes.

The presence of various chemicals, including acids, bases, alcohols, volatile agents and toxic or carcinogenic organic compounds must be anticipated. Also note that such facilities are regularly disinfected by means of gaseous formaldehyde fumigation, which normally takes place over a twelve hour period. In addition to this, other hazards such as compressed gasses, such as oxygen, nitrogen, hydrogen and helium, could also be present. You

may also encounter certain animals in laboratories, which are being used for research purposes.

Pathogenic organisms

Biohazards generally arise from a range of single-cell organisms. These are referred to as pathogenic or disease causing organisms and are classified into the following four groups:

Bacteria: While most forms of bacteria are relatively harmless some can produce toxins which can lead to diseases such as tuberculosis (TB), anthrax, tetanus and bubonic plague. Bacteria are a necessary part of the soil and in animal and human bodies and is capable of rapidly multiplying in ideal, mild conditions. In elevated temperatures (60 degrees Celsius) bacteria will generally be destroyed within thirty minutes.

Viruses: Viruses are much smaller than bacteria and consist of nuclear materials ie ribonucleic acid (RNA) and deoxyribonucleic acid (DNA) and are surrounded by a complex outer layer of protein. Virus cells will generally attach themselves to a host cell to reproduce and then infect the other cells. Common examples of viruses include human immunodeficiency virus (HIV), Lassa fever, rabies and smallpox.

Protozoa: These are larger single cell, often water borne organisms similar to bacteria. Malaria and amoebic dysentery are examples of protozoa.

Fungi and spores: These organisms live as parasites on a host and include thrush and ring worm.

Pre-planning

It is obvious that the type, physical state and quantity of the product will inform the level of emergency service response. Certain products will have an immediate threat to human life while others may pose no threat to humans but may threaten animals, marine life or the environment. All premises containing hazardous materials are required to have adequate contingency plans. This includes the availability of on-site specialist advisors who should be reachable even after normal operating hours. These specialists will



Certain substances have the physical and chemical properties, which allow them to be absorbed through the skin

be able to provide the necessary information on the products involved such as how it will react in a fire (microorganisms will generally be destroyed if exposed to a fire) toxicity levels, packaging, location of high risk materials etc.

It is also important to note that if you are responding to a fire incident in a laboratory environment a number of other potential hazards such as cryogenic gasses, hydrogen cylinders, chemicals (acids, alkalis, flammables) and the possibility of radiation.

Within a large laboratory, it is crucial that the exact location of the bio-hazard is known. Generally, it will be made fairly obvious by on-site personnel but an additional amount could be in storage.

The response to a facility containing toxic substances and bio-hazards will ultimately require a multi-agency response and it is therefore important that all health, law enforcement and environmental stakeholders are included in the emergency planning.

Emergency response

It would be disingenuous to refer to any hazmat incident as a 'standard incident' but clearly there are a range of activities that should form part of all hazmat standard operating

procedure (SOPs) and must most definitely be implemented on UN Class 6 incidents. These include approaching from an upwind position (as far as possible), establishing safety zones around the incident and limiting access into these zones. Your hazmat unit should obviously form part of your first response.

Establish early contact with the site safety supervisor and any product specialists that might be required. Together with these persons and the incident safety officer, devise a plan of action and plan a thorough briefing to all personnel prior to the commencement of any operational tasks. In the event of a fire incident try to limit the runoff of water to prevent the spread of harmful substances into nearby water courses or drainage systems. If it is a large and/or intense fire, microorganisms could be carried into the air currents and therefore downwind evacuation should be considered. Incident discipline during such an incident is critical and eating or drinking should be prohibited at all times.

Personal protective equipment (PPE) will be a major factor when responding to these types of incidents. The level of PPE will depend on the nature of the hazard as well as the potential for exposure. As with any



Within a large laboratory, it is crucial that the exact location of the bio-hazard is known

► rescue situation the decision needs to be taken to place your personnel at risk only if the dividend is high ie if the probability of saving life is high then it will substantiate the risk being taken. If there is no possibility of saving any lives, don't take any chances.

A thorough decontamination of all staff and equipment involved in the incident must be conducted. This will include a screening process immediately after the incident as well as ongoing screening for as long as is recommended by specialists on the particular substance.

EMS response

Paramedics and emergency medical services (EMS) personnel will be at greater risk of exposure to toxic substances than fire fighters. They may be called upon to respond to incidents where patients have been overcome by some sort of toxic substance such as commercially available insect or rodent poison or weed killer. They will often not have the correct personal protective clothing available. It is therefore difficult to cover any eventuality and therefore important to check for any signs that a potentially toxic substance may be present. The location of the patient, signs and symptoms and presence of containers that possibly could contain such substances should be noted. There are not many signs that a patient may

be suffering from toxic exposure. Some examples could include a fever from metal fume intoxication, copious secretions accompanying organophosphate poisoning, rhinitis, conjunctivitis and pharyngitis as seen in irritant gas exposure and rales and dyspnoea from pulmonary injury.

If it is suspected that a patient may be contaminated by a toxic substance, the EMS must immediately withdraw to a safe position and make prepare the necessary personal protection. No patient must be moved to a hospital without undergoing at least a basic, first-stage decontamination. Ideally a hazmat unit must respond to an incident where a patient may be exposed and a thorough decontamination system set up. Preplanning must be done with hospitals that are capacitated to

receive affected patients. Do not take a contaminated patient to a hospital without prior notification and confirmation that the hospital will accept the patient. They will normally generally have a specially designated area to where they can be taken for further decontamination and treatment.

In the event that a contaminated patient has been transported, the EMS crew should also be thoroughly screened and treated as patients until they are cleared of any signs and symptoms. The ambulance that was involved should also be taken out of service until they are properly surveyed and only if safe can they be placed back into service.

In closing

Not every incident involving a toxic substance will be completely obvious when you get the call or even arrive on scene. Remember the old saying: "Fools rush in where angels fear to tread". Gather as much information as you can, be observant. Speak to the site representatives, bystanders. Ensure that you have all the information you need before committing your troops. It might be the most important thing you do on the entire incident.

If you have no way of detecting the presence of hazardous materials on your hazmat rig, it's not a hazmat rig. ⚠

FIREFIGHTER SKIN ABSORPTION FACTS

- Groin 300%
- Jaw Angle 93%
- Forehead 43%
- Scalp 25%
- Back 12%

You must decon your body, and a deconned body is only as good as the clean gear you are putting on it!

SKN LOVE

SAMRO National Assessor Workshop

held in Bloemfontein, South Africa

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

The South African Medical Rescue Organisation (SAMRO) National Assessor Workshop 2018 was held in Bloemfontein in the Free State Province, South Africa during June 2018 with the aim to support and assist the assessors to plan, conduct and review assessments for the rescue team in understanding their rescue skills performance in a rescue scenario.

The purpose of the assessor's workshop was to ensure that the teams are assessed by competent specialists working from established best practice assessment methods. Added to that is to recognise the current competency of the experienced assessors to assess the outcomes of their rescue skills in an assessors' training programme.

It was important for SAMRO that assessors understand the environments under which the assessment will be directed:

- The World Rescue Organisation (WRO) and SAMRO requirements for assessment national and international
- Platform about strength, reliability, objectivity and flexibility as an assessor
- Safety and the dangers related with assessment
- The assessment guidelines in the public safety

During the workshop, SAMRO also identified weaknesses and provided support to help develop the assessor qualifications to conduct the assessment as it is imperative for the assessors to be qualified in the following units in assessment and workplace training:

- Plan assessment
- Conduct assessment
- Review assessment
- Organise assessment
- Assess competence
- Participate in assessment validation



During the event, a strategy was developed that identifies the relevant sources of evidence to confirm competence during assessment.

The workshop was supported by three assessors from the World Rescue Organisation (WRO) who were carefully observed in order to acquire similar skills and competencies. This enabled incoming assessors to determine the basics and performance criteria choice of variables, gaining knowledge, expertise and competencies.

The national assessors were provided with the following documents prior to the workshop in order to support the assessment process on the upcoming event:

- Rescue skills learner workbook
- Assessors policies
- The role of the assessors documents
- Marking sheets

On the second day the practical scenarios, the assessors debriefed the team about their performance. This allowed the team and the assessors to interact and evaluate the scenario and how it was mitigated. The evaluation was based on the work performed during the scenario and not on what the assessor felt 'should' have been done.

During our three-day programme we covered the following:

- Contribute in a rescue process assessment
- Equipment during the assessment
- Upholding safety during the assessment
- Effects to look for during assessment (critical aspects of evidence)
- Marking sheets
- Assessment policies
- Dependable performance
- Precise resources needed for the assessment.

At the end of this workshop, we came to a point to review our assessment process as an assessor and ask ourselves the following questions:

- Did it work? Why or why not?
- How can I make what I did more efficient?
- Did we cover, discuss and clarify issues and problems with the learning and development of the assessment team.

In conclusion, these workshops allow participants, rescuers and assessors to try out and evaluate new tools, techniques, equipment and new vehicles in a controlled environment in a real-world setting.

Safety is of utmost importance and forms part of all the evaluation criteria. ▶

Rescue roundup

- ▶ Safety includes team and patient safety, as well as an awareness of the hazards within the scenario and posed by current vehicle technology.

We had a great workshop this year in central South Africa in Bloemfontein! Sincere thanks to the workshop speakers, programme

committee members, organising committee members and most of all, to the wonderful assessors for making this year's workshop a great success!

We are very encouraged by the level of attendance and engagement during the event.

We are very appreciative of the information and views we have gathered through your input and we will be producing a report on the outcome as a project deliverable.

Once again, thank you for making the workshop successful and we appreciate your continued support. ▲





Chubb Fire and Security changes name and branding



Chubb Fire and Security renamed and rebranded to National Security and Fire at an event held at its head office in Midrand, Gauteng, South Africa in April 2018.

Chubb has sold 100 percent of its South African business to a black economic empowerment consortium led by Kilimanjaro Capital. "We are now a 100 percent, South African-owned company and proud to be associated with 'Proudly South African'", said new CEO Yagan Nair. "While the company is still in the process of making key appointments and finalising implementation, it has ambitious plans to grow into the future, notably by harnessing the vast national footprint of Chubb".

Ranesh Ranjith, sales and marketing director welcomed all at the launch followed by a video introducing the new branding. CEO Yagan Nair added, "We are committed to 'making

South Africa safer together' with all stakeholders and to use improved safety and technology as a catalyst for growth and job creation. Together with our shareholders and their vast entrepreneurial backgrounds we are confident of realising this dream."

Following a video detailing the fire suppression and detection product range, Andrew Worthington, director of fire and integration systems provided an overview of National Security and Fire's product offering.

Speakers at the launch included Martin Hough, international sales support manager of Angus Fire in the UK, who discussed the complexity of foams, detailed the types of foams and its ingredients and explained what a surfactant is and how it works. Hough also shared video footage of events that changed foam forever, overviewed foam toxicity and shared considerations when changing foam stock.

Rodney Eksteen, assistant director, for Western Cape Fire and Rescue Services provided an overview of the fire safety project of the Western Cape Province, which include the installation of smoke alarms in the informal settlement. Eksteen shared research and statistics done on a few of the informal settlements and the impact of the Smoke Alarm project.

Karel Roodt, director at The Fire Engineer, shared a number of case studies on major industrial fires such as the major fire at Transnet in Durban, South Africa, the parking lot fire in Leeds, UK in January 2018 and the Imperial Sugar Company's dust explosion, amongst others. Roodt also detailed the fire risk assessment process.

National Security and Fire offers a comprehensive portfolio of safety and fire solutions and combines more than 200 years of safety and fire expertise with state-of-the-art technology & a highly skilled workforce. The company's national footprint and ongoing innovation is key, offering the full range of fire detection, suppression, protection and sprinkler options. The company has the ability to provide a total solution for all risk management requirements and in addition, has an in-house design and commissioning office.

The product range includes fire portables, fire detection, conventional fire panels, advanced analogue addressable systems, detectors: smoke, flame and thermal, gas detection systems, fire sprinklers, vehicle suppression systems, dry chemical powder fire extinguishers, carbon dioxide fire extinguishers, trolley units, hose reels, layflat hoses, covers and hydrants, valves, cabinets and brackets, branch pipes, safety signs, marine fire suppression and systems, evacuation/public address systems, the Angus Fire product range and Angus flexible pipelines.

The event came to fruition with a vote of thanks from national fire sales manager, Dawid Oberholster. ▲

Weeds in our Lives

By Wayne Bailey



Wayne Bailey

Weeds will always be part of our life if we don't keep them in check. If you pour water into a vase, the water becomes the vase. Humans are the same way. Daniel D Palmer said, "Little deeds are like little seeds, they grow to flowers or to weeds. If you have a garden or have plants outside, you will find weeds. A sidewalk with tiny cracks, you'll find weeds there too. How in the world do they get there? Could be from bird droppings or from the wind blowing seed around? I've even seen weeds growing on the side of a building and in gutters. Why?

Don't water the weeds. Sylvia Browne said, "The weeds keep multiplying in our garden, which is our mind ruled by fear. Rip them out and call them by name." By recognising the weeds, we can control their growth and get rid of them. We humans have the ability to develop bad habits, cutting corners, talking bad about the boss, hanging out with hot headed friends or constantly being critical, feeding self-pity, complaining and

condemning others. By doing these bad habits, we grow weeds in our life and some grow so high we can't see over them. Don't feed what you don't want to grow in you.

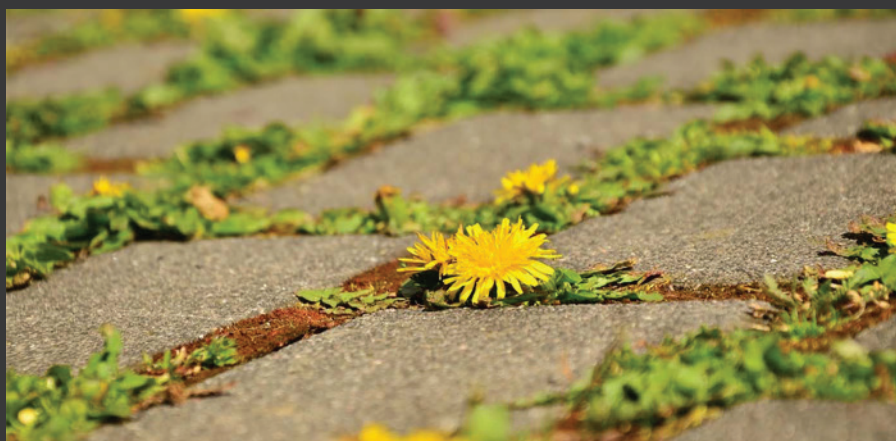
If you hang out with someone that has a cold, there a good chance you will catch it. With the reverse, if you hang out with someone that's always upbeat, courteous to others and sees the glass half full and flowing over, you can't help to get some of that on you. Someone once said, "Don't worry about whether the glass is half empty or half full, just add ice and make the best of it!" It's like giving cologne or perfume to someone, the smell lingers on your hand for hours after giving it away. Hang around someone that has a smile, doesn't cheat on their girlfriend or boyfriend or spouse. People that will do this, have a cancer in their heart. This is not a cold or sickness I want to catch.

Water the fruit in your life. Henryk Sienkiewicz said, "On an exhausted field, only weeds grow." Spend time with the ones you love and keep your batteries charged. A healthily lifestyle helps keeps the weeds out of the garden. Children, spouse, parents, and or co-workers that lift you up and not talk trash about others. Go out and volunteer using your strengths, talents and

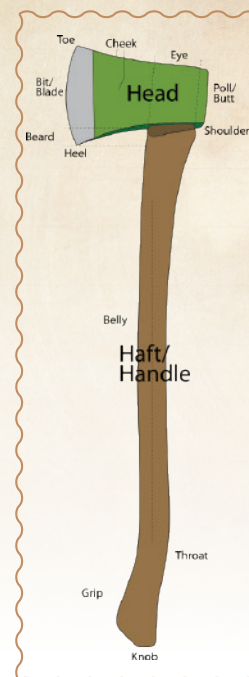
gifts for people less fortunate than you. When you give of yourself, there's a mind-set of satisfaction, accomplishment of helping a stranger. Someone that can't return the favour.

Believe in new beginnings. Brian Grazer said, "You have to know the weeds, to have lived in them, to delegate. I wouldn't want to be a leader who had never lived in the weeds." We can always learn something about having weeds in our lives even if just to recognise them when they grow within your spirit. Leave the old in the past. If you continuously open up old wounds, they will never heal. Look forward and NOT backwards. If you look constantly in the rear view mirror while driving, you're going to crash. Why would you do this when the windshield is much bigger and pointing you to your future?

In closing, when a sentence ends, it had had a period. This could be a dissolved marriage or relationship, job or a business that has gone under. Sometime we just got to put a period in there and not a comma. We all need new starts. Today may be that day to end that ugly chapter in your life. Start today by pulling some weeds out of your life and beginning with a new sentence that reads, "I will persevere." 🌱



The history of the flathead axe



Humans have used axes for most of our history. The inherent usefulness and versatility of these tools made them an obvious choice for the fire service. The history of the axe in the fire service is hard to trace, simply because of how closely the two have been tied throughout time. Suffice to say that for as long as people have been fighting fires, there was probably an axe being used to help with it.

Initially axes were tools of stone called hand axes, used without handles (hafts) and had knapped (chipped) cutting edges of flint or other stone. Stone axes made with ground cutting edges were first developed sometime in the late Pleistocene in Australia, where ground-edge axe fragments from sites in Arnhem Land date back at least 44 000 years.

Ground-edge axes were later invented independently in Japan sometime around 38 000 years ago and are known from several Upper Palaeolithic sites on the islands of Honshu and Kyushu. In Europe, however, the innovation of ground edges occurred much later, in the Neolithic period ending 4 000 to 2 000BC.

The first true hafted axes are known from the Mesolithic period circa 6 000BC. Few wooden hafts have been found from this period but it seems that the axe was normally hafted by wedging. Birch-tar and raw-hide lashings were used to fix the blade.

From the late Neolithic/Chalcolithic onwards, axes were made of copper or copper mixed with arsenic. These axes were flat and hafted much like their stone predecessors. Axes continued to be made in this manner with the introduction of Bronze metallurgy. Eventually the hafting method changed and the flat axe developed into the 'flanged axe', then palstaves and later winged and socketed axes.

The axe has many forms and specialised uses but generally consists of an axe head with a handle or helve.

The axe is an example of a simple machine, as it is a type of wedge or dual inclined plane. This reduces the effort needed by the wood chopper. It splits the wood into two parts by the pressure concentration at the blade. The handle of the axe also acts as a lever allowing the user to increase the

force at the cutting edge, not using the full length of the handle is known as choking the axe.

Generally, cutting axes have a shallow wedge angle, whereas splitting axes have a deeper angle. Most axes are double bevelled, ie symmetrical about the axis of the blade but some specialist broadaxes have a single bevel blade and usually an offset handle that allows them to be used for finishing work without putting the user's knuckles at risk of injury. Less common today, they were once an integral part of a joiner and carpenter's tool kit, not just a tool for use in forestry. A tool of similar origin is the billhook.

Most modern axes have steel heads and wooden handles, typically hickory in the US and ash in Europe and Asia, although plastic or fibreglass handles are also common. Modern axes are specialised by use, size and form. Hafted axes with short handles designed for use with one hand are often called hand axes but the term hand axe refers to axes without handles as well. Hatchets tend to be small hafted axes often with a hammer on the back side (the poll).

Design

The flathead axe has three essential parts. First, the cutting wedge or blade of the axe, this part is used for cutting and sometimes prying motions. Secondly, the striking face or rear of the axe head. On the flathead axe, the back of the axe is flattened and serves as a striking tool much like a sledgehammer. This is the main difference between the flathead axe and its cousin the pickhead axe. Finally, there is the 'haft' or handle of the tool. It is where the axe is gripped in use.

Uses

The flathead axe has many different uses on the fire ground.

Forcible entry

Together with the Halligan bar the flathead axe makes a set that we call 'the irons' or 'the marriage'. This combination of a prying tool and a striking tool are used primarily to achieve entry into locked buildings

to allow fire fighters to perform search and rescue ops, as well as to put out the fire. There are also techniques that can be used to make entry with just the flathead axe. It is less reliable than using the irons but in certain situations may be necessary or may be quicker.

Search and rescue

The flathead axe is one of the main tools that are used once you've gained entry to search a burning building for victims. The axe is gripped near the head and the haft is used as an extension of the arm to allow the fire fighter to search a larger area in zero-visibility conditions.

Overhaul

The flathead axe can be used to chop and smash through areas when checking for fire extension into walls and ceilings to prevent a fire that had been extinguished from rekindling. Pike poles are more frequently used for this work but in some situations the flathead will be a better choice of tool.



The inherent usefulness and versatility of these tools made them an obvious choice for the fire service

An ancient tool, the axe provides fire fighters with the advantage of a multi-purpose device. A fire fighter and his axe are like the sea and its waves. ▲

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2018

July

22 - 27 July 2018

53rd Annual GSSA Congress

The annual congress will be hosted by the Gauteng Province and will be incorporating the highly acclaimed research skills workshop to be held from 22 to 23 July 2018 and the second policy and practice workshop focussing on ecological infrastructure on 27 July 2018

Venue: ARC Training Centre, Roodeplaats Vegetables and Ornamental Plant Institute, KwaMhlanga/Moloto Road (R573), Pretoria

For more information visit:
<http://grassland.org.za/events/upcoming-events/annual-congress-2018>

August

10 - 11 August 2018

Toughest Fire Fighter Alive, 2018

The South African Toughest Firefighter Alive Championships will be hosted by the fire fighters for Excellence Foundation in Cape Town, South Africa

Venue: Roeland Street Fire Station, Cape Town

Contact: Mark Smith
Email: tfa@fireandrescue.co

September

10 - 17 September 2018

The 13th World Firefighters Games Chungju, 2018

The World Firefighters games was established to promote international fire fighting information exchange in addition to fostering friendship between current or retired fire fighters (including soldiers) and their families through sports. Unlike elite sports events, fire fighters from all over the world can participate in the event, rather than competition. In order to create a festive atmosphere, the competition differs according to age and gender

Venue: Chungju, South Korea

For more information visit:
http://wfg2018.chungbuk.go.kr/eng/sub.php?code=01_abou04

19 - 20 September 2018

The Emergency Services Show

The Emergency Services Show is the UK's leading annual showcase of the blue light sector, featuring over 450 exhibitors, live demonstrations, unique learning opportunities and unrivalled networking

Venue: Birmingham, UK
For more information visit: www.emergencyuk.com/welcome

19 - 23 September 2018

Africa Aerospace and Defence (AAD)

The Africa Aerospace and Defence (AAD) is Africa's only aerospace and defence expo that combines both a trade exhibition and an air show

Venue: City of Tshwane
For more information visit: www.aadexpo.co.za/contact-us

25 - 27 September 2018

Medic East Africa

The show aims to provide an exclusive platform for the healthcare and medical laboratory market and will bring together more than 4 000 of the region's most influential decision makers

Venue: Visa Oshwal Centre Westlands, Nairobi, Kenya

For more information visit:
www.medic-east-africa.com/en/

27 - 28 September 2018

ICFSST 2018 : 20th International Conference on Fire Safety Science and Technology

The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results about all aspects of fire safety science and technology. It also provides the premier interdisciplinary forum for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns, practical challenges encountered and the solutions adopted in the field of fire safety science and technology

Venue: Holiday Inn London, Wembley, UK

For more information visit:
www.waset.org/conference/2018/09/london/ICFSST/home

19-20 September 2018

Disaster Management Institute of Southern Africa (DMISA) Annual Conference

Disaster Management Institute of Southern Africa's (DMISA) 34th annual conference. This year's theme is Mobilising Future Ready Resilience. DRR 2018 will focus on reducing direct disaster economic losses, aligning with the UNISDR Sendai 7 Campaign's 2018 Target 3 priority

Venue: Kopanong Hotel and Conference Centre, Benoni, Ekurhuleni

Contact: Karin Muller,
Tel: 011 822 1634
Email: Karin@disaster.co.za

October

3 - 5 October 2018

Veldfire Management Symposium

The underlying theme for this year's symposium is: "From commitments to action: Ecosystems based fire management for effective disaster risk reduction"

Venue: Nelson Mandela University George Campus

Contact: Tiaan Pool
Email: Tiaan.Pool@mandela.ac.za

11 - 13 October 2018

Florian 2018

Trade fair for fire brigades, civil protection and disaster control. Integrating the rescue service forum aescutec into Florian stands for an holistic approach to regard all rescue forces in this unique fair

Venue: Dresden, Germany

For more information visit:
www.messe-florian.de/en/

17 - 19 October 2018

4th Biennial Conference of the Southern Africa Society for Disaster Reduction

The conference theme is stop disaster risk creation in SADC, covering various subthemes as Urban risk and development, Climate smart agriculture, Socio-ecological resilience and Hazard and risk governance among others

Venue: Coastlands Umhlanga Hotel, KwaZulu-Natal

For more information visit: <http://sasdir.org>

21 - 27 October 2018

World Rescue Challenge 2018

The bid to host the 2018 World Rescue Challenge has been won by WRO member Organisation, the South African Medical Rescue Organisation (SAMRO), South Africa. Details of the event will be made available on the website when they become available, however those interested in attending should note that the proposed may be subject to change at this early stage

Venue: Cape Town

For more information visit:
www.wrescue.org

November

26 - 30 November 2018

Wildfire Ready Convention

Official opening of the Western Cape's wildfire season, hosted by Western Cape Umbrella Fire Protection Association

Venue: Lourensford Wine Estate, Somerset West

Contact: Email: sue@wcuftp.co.za

2019

January

28 - 31 January 2019

Arab Health 2019

For 44 years Arab Health has brought the latest innovations in healthcare. From state-of-the-art imaging equipment to the most cost-effective disposables; developments in surgery to advances in prosthetics, Arab Health continues to be at the heart of healthcare in the Middle East

Venue: Dubai World Trade Centre, UAE

For more information visit: www.arabhealthonline.com/en/Home.html

May

4 May 2019

International Fire Fighters Day 2019

International Fire Fighters' Day is observed each year on 4 May. On this date you are invited to remember the past fire fighters who have died while serving our community or dedicated their lives to protecting the safety of us all. At the same time, we can show our support and appreciation to fire fighter's worldwide who continue to protect us so well throughout the year.

Ambition

I have no ambition in this world but one
and that is to be a fire fighter.
The position may, in the eyes of some, appear to be a lowly one
but we who know the work that the fire fighter has to do,
believe that his is a noble calling.

There is an adage which says that, "Nothing can be destroyed except by fire."
We strive to preserve from destruction the wealth of the world
which is the product of the industry of men,
necessary for the comfort of both the rich and the poor.

We are defenders from fires of the art which has beautified the world,
the product of the genius of men and the means of refinement of mankind.
But, above all; our proudest endeavour is to save lives of men - the work of God Himself.

Under the impulse of such thoughts, the nobility of the occupation thrills us
and stimulates us to deeds of daring, even at the supreme sacrifice.

Such considerations may not strike the average mind
but they are sufficient to fill to the limit our ambition in life
and to make us serve the general purpose of human society.

Author: Edward F Croker, Chief of Department, FDNY 1899-1911

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