

February 2017

New Zealand's firefighter magazine

K1



Whitianga peninsula razed

In this issue

Full steam ahead for FENZ	3
Baxter next NSW Commissioner	4
Rare double gold for Bulls	4
Klaphake case drives policy change	5
Squid left at the altar	6
Record low for New York fire deaths	8
Firebombing 50 years old	9
Talk it, don't cork it!	10
27 years of deaths haunts Chief	11
High level proof needed for suicide by fire	12
Painter father of fire hose	13
LFB's glass ceiling cracked	15
Old Mt Eden now luxury apartments	16
10 medics a month being hospitalised	18
Firefighters ride, ok!	19
Four houses lost in Whanitanga blaze	20
30 firefighters killed in Tehran building collapse	21
Hobbits impress again	22
Five firefighters killed in Chile wildfires	23

K1

February 2017

K1 is an independent magazine produced by the K1 Group.

Editors: Ross Miller and Russell Postlewaight.

All correspondence to: k.1group@gmail.com

All material in this publication is copyright and permission must be sought before reproducing, other than for brigade members' perusal.

Every effort is made to identify the copyright holder of photographs in this publication, though with email bounces, it is not always possible to find the true source.

Comment in this publication does not necessarily reflect proprietor or NZFS opinion.

ISSN 179-928X

Cover photo



A helicopter sorties with yet another monsoon bucket at the Whitianga fire, but too late for this house.

Picture courtesy of RNZ. Photographer: Carla Penman.

<http://www.radionz.co.nz/>

Full steam ahead for FENZ

by Russell Postlewaight

7 he recently published intentions of FENZ for 'Day One' is all go, according to NZFS Board chair Paul Swain. In a recent interview with *K1 Magazine* he was positive and enthusiastic that all the planning, and implementation of the legislative requirements, is proceeding according to plan.

Confident that the personnel of the new organisation will be maintaining their excellent business as usual roles, the only change possibly noticeable by alert members of the public, initially would be the name of the new emergency organisation. Confident also that the amalgamation to one single seamless entity has a broad appeal with staff and stakeholders alike. The unification and amalgamation should be mostly completed by 2020.

When asked if the recent departure of Chief Executive/ National Commander Paul Baxter would have any effect on the process or the new organisation, he responded that while he was sad to see Paul go, the work for change that he [Baxter] had initiated and undertaken was such that the effect would be minimal.

"This is a big opportunity and I am excited for him. To move from here to command the largest fire organisation in Australia has given the co-operative relationship with the emergency services in Australia a great boost. Paul is well-known there though his work with AFAC and I wish him all the best."

With the recent advertising for three senior management

positions currently open, he insists we are in a position to see what skills and capabilities senior fire managers worldwide have to offer.

When asked about recent comments about the denigration of the National Commander's role now that that it will be split under FENZ with a separate chief executive, he outlined that neither was less important than the other and that each had different and equally important responsibilities.

"There are," he said, "major risks to manage" unique to each position. For example, the Chief Executive will be focused on such things as the levy and financial base, local committees, and overseeing the broader picture of the amalgamation as we proceed from July 1 through to 2020. The National Commander Urban and National Manager Rural will be focused on things such as the trucks rolling out the door. He stressed all positions were equally as important to the process as well as the future of the whole organisation.



Employment contracts, as previously publicised, will be honoured and continued as will the consultative and advocacy roles currently done by the various organisations such as the NZPFU and UFBA as outlined in the new Act.

A Memorandum of Understanding was recently signed with UFBA official Rick Braddock outlining and guaranteeing support for volunteer members. Their status as 'FENZ employees' may seem unusual to some but is seen as necessary in today's world with health and safety as well as other legal obligations.

Swain stated that he was "passionate" about the formation of local committees as his role in local government overlapped this and made it easier to recognise the value to local volunteers and their communities.

Continuing support for volunteers, both urban and rural, would be maintained and any

shortcomings identified in regular reviews would be forthcoming. He noted that on a recent visit to Blenheim during several large deliberately lit vegetation fires, the co-operation, knowledge, planning and resource sharing between the urban and rural volunteers impressed him, showing that what was in the grand scheme of things post-Day One, is workable and has a bright future.

Baxter next NSW Commissioner

National Commander Paul Baxter has been appointed Commissioner for Fire and Rescue, New South Wales.

New South Wales is the largest of the Australian urban state services with a network of 337 fire stations, a fleet of 667 firefighting vehicles, 182 accredited rescue crews, more than 6800 firefighters, about 7000 community fire unit members and 455 admin and trades staff.



Mr Baxter will remain NZFS national commander and CEO until a fixed term replacement is found. That appointment will last through to the appointment of a new CEO For FENZ. During his career, he been a volunteer firefighter and was also an RNZAF firefighter before becoming NZFS career staff.

Mr Baxter is no stranger to the Australian scene as he currently is the president of AFAC.

Deputy National Commander Paul McGill has been appointed CEO and National Commander until the selection of new executive positions for FENZ.

Rare double gold for Bulls

A rare Gold Star double has been presented to Riverton CFO Helen Bull and her husband, SSO Ranui Bull of the neighbouring Colac Bay brigade.

The couple met during joint brigade training sessions – Colac Bay is an auxiliary to Riverton.



Awards for December and January were:

50 Year Medal

Don Dunlea
Graham Stewart

Rakaia
Hororata

Gold Stars

Ranui Bull
Helen Bull, Craig Ward
Ross Billman, Craig Dodd, Scott Duganzich,
Glen Robertson, Danny Sharp, Ropata Stirling
Bruce Purdie
Gary Beer, Paul Callaghan, Bruce Ingold
John McCade
Peter Morely, Charles Tipper, Ronald van der Horst

Colac Bay
Riverton
Hutt Valley
Piopio
NW Auckland
Rangiora
Edgumbe

Klaphake case drives major policy change

7

he NZFS will institute a change of policy meaning all firefighters – whether paid, volunteers or part of Operational Support – will now be fully supported if legal proceedings are ever brought against them. The fire service is to be applauded for recognising and publicly accepting change was needed.

The move falls out of the high profile case against Wellington Ops Support SO John Klaphake who was involved in an intersection accident while under lights and siren. He was found guilty of careless use, fined \$1500 and banned from driving for a month. What upset many was the lack of support from both the UFBA (which at the time was bound by its constitution to support brigades only, not individuals) and an NZFS policy that if a firefighter was perceived to be outside NZFS regulations, no support was given.

The UFBA voted to amend its constitution at this year's conference to allow it to advocate on behalf of individuals. What is interesting about the NZFS regulations stance is that such decision had to be made before proceedings and the possibility that the judge could have called in favour of the firefighter.

During court proceedings, the Fire Service refused to help Klaphake pay his legal bill, citing that he had broken NZFS rules about the speed he should have been going through a red light. But now the Fire Service has changed the grounds on which that decision was made, and has offered to pay Klaphake's legal costs of about \$15,000.

Deputy National Commander Paul McGill said all firefighters – whether paid, volunteers or part of Operational Support – will now be fully supported if legal proceedings are ever brought against them. "When we looked at our legal policy, we realised that it was too restrictive, and in some cases it was limiting the support we really wanted to give our people. It's our intention to support our people when they find themselves in this situation, when carrying out their duties, so we wanted to change the policy so it gave more discretion to our managers to provide that support.

"It was this traffic accident that really brought starkly to our notice that our procedures were too black and white and we just want to assure all firefighters that the support they expect from us will be there for them." NZFS is applying the new policy retrospectively in SO Klaphake's case, and has provided funds to repair the car and cover counselling costs for those involved in the accident.

Auckland takes out insurance

The case prompted Auckland Operational Support to take out its own insurance to cover its drivers, so they didn't have to fork out if something similar happened to them. CFO Glenn Teal, said the policy change was the right move.

"A lot of volunteers were concerned about exactly the same thing that we were. We had a lot of enquiries about what we were doing, what this insurance was about, what their risks were etc., so I'm sure that it's not just us that's happy, but volunteers in general will be very happy that the policy is going to get changed."

He said that with FENZ on our doorstep, there's a lot of emphasis on sustaining volunteerism in the new legislation, and this policy change will help that.

Squid left at the altar

Squid McKenzie twitched, but didn't move when the siren went up, and became one of a select few to be 'stood up' by his own brigade!

There was a minor stampede as the rest of the Kaitaia brigade charged out the front doors of the church and on to the station. Feet planted firm, Squid stayed at his bride-to-be's side – probably the only time in his 50 year career he has ignored the siren.

At his 50 Year Medal presentation recently, he said he remembered the "No you don't" look from his fiancée when that siren sounded, but for 46 more years (so far) his wife Pat has put up with innumerable disruptions to home life and special family events.

David ("nobody knows me by that name") McKenzie transferred his apprenticeship from Waihi to Kaitaia after a holiday in the northern town. He joined the Kaitaia brigade on October 2, 1966, together with Terry Sullivan and the late George Hodson, as the result of answering an advert in the *Northland Age*.

Today Kaitaia runs a Type 2 Iveco, a Type 1, a 1994 Mitsubishi and a HiAce van. Back in those good old days Kaitaia had three appliances – a double cab 1958 Ford V8, a short wheelbase Land Rover with a pump mounted on the back and a long wheelbase Land Rover that carried all the hoses and towed a V8 trailer pump.

"In my first year we had 47 calls for the year and, so far this year (6 December) we have had 307 calls. So the call numbers have changed dramatically, which is not good."

On the occasion of his first fire, Squid was reminded of his place in the brigade. In his enthusiasm he hopped onto the back step of the SWB Landrover only to be told to get off as he was a new member. "So I sat on the hoses under the canopy of the other Rover for the 20 mile drive. I found out later that the guy who ordered me off the step had only been in the brigade a week longer than me!" The brigade managed to save that house, but two days later it went up in flames again and couldn't be saved.

His biggest blaze was the Princess Theatre in April 1990, which was razed despite a three-hour battle assisted by neighbouring brigades

– the 1920s vintage structure was the last of Commerce St's wooden buildings. Entry to the burning building was gained by Firefighter (now CFO) Colin Kitchen smashing down a door with a fire axe. Inside the heat was so intense, it melted one side of Colin's helmet.

Squid was on the roof of a neighbouring building spraying water over it to stop it igniting. At the height of the blaze 18 hoses were in use and tenants of the neighbouring buildings began evacuating their belongings. The power board's cherry picker was utilised to allow firefighters the elevation to douse the projection box. Part of the facade was later torn away to facilitate access. The crews stayed overnight, cleaning up hot spots, sustained by a continuous stream of cups of tea from neighbours.

The call had repercussions throughout the Far North – Ahipara and Mangonui both sent



Squid at work installing yet another smoke alarm. Photo: Northern News

a truck while Mangonui No.2 backed-up at Kaitaia's station in case of other calls. The Kaeo brigade sent an appliance to Mangonui to provide cover there, while Kerikeri moved a truck to Kaeo. The Okaihau brigade was placed on general stand-by for wherever ...

Move to fire safety

After three Far North children died in a house fire in the late 1980s, NZFS asked Squid if he would move into fire safety/education. He was promoted to station officer and now travels around 18 schools from Te Hapua to Maungamuka, as well as doing fire safety checks in people's homes.

He still chuckles about the time he was called back to visit an elderly lady whose smoke alarm would not stop beeping. "I was just going to bed, the phone rang and it was the same lady saying 'it's beeping' ... I went straight up there. I went in the direction of the beeping and closed the fridge door. The beeping stopped. She'd made herself a cup of tea and left the fridge door open."

Squid was doing a home fire safety check recently and fitting a smoke alarm when he asked the young mother of the baby crawling around the floor what she would do if the smoke alarm woke her from her sleep in the middle of the night. "She answered: 'I would get down low and get out taking my baby me, and I would stay out and go to my safe place and call the fire brigade.' I must have looked surprised by her answer because she said she had learned that when I took her class for Fire Wise when she was in Year 2 at Kaitaia primary school.

"That would have had to be at least 20 years ago, so it does work and proves taking the Fire Wise programme around the schools is worthwhile." Squid was awarded the QSM in 2008 for his fire safety work, by which time it was reckoned he had installed 1500 smoke alarms. The safety theme runs through all his brigade work, as he is also the occupational health and safety representative and a member of the brigade's critical incident stress team.

Squid has been active in fire brigade competitions and has also taken an interest in the World Firefighter Games. He was a spectator at the Las

Vegas games in 1990. When the Games came closer to home (Perth) in 1992, he teamed up with Dargaville's Max Jones and entered the lawn bowls pairs. They won the bronze medal! He also attended Edgington (Canada) in 1994 and in Christchurch in 2002 as a spectator – a great way to meet a lot of firefighters from all over the world, he said.

Squid is not retiring anytime soon as he still derives a lot of satisfaction from his work.

By the way ... those dedicated chaps who hurriedly left the wedding service back in 1971 ... they made it back in time for the wedding reception!

A shoulder to lean on ...



Road manners don't always pay off ... one of two Queenstown trucks responding to a bonfire at Mohe Lake pulled over on a narrow gravel road to allow another vehicle past when the shoulder of the road collapsed.

Stuck on its axle, firefighters tried for over five hours to free it before leaving a security guard on the truck overnight. The next morning the crew returned with a JCB (pictured) and an excavator to lift the truck back on the road – a 20 minute job. Photo: Tracey Roxborough, *The Country*.

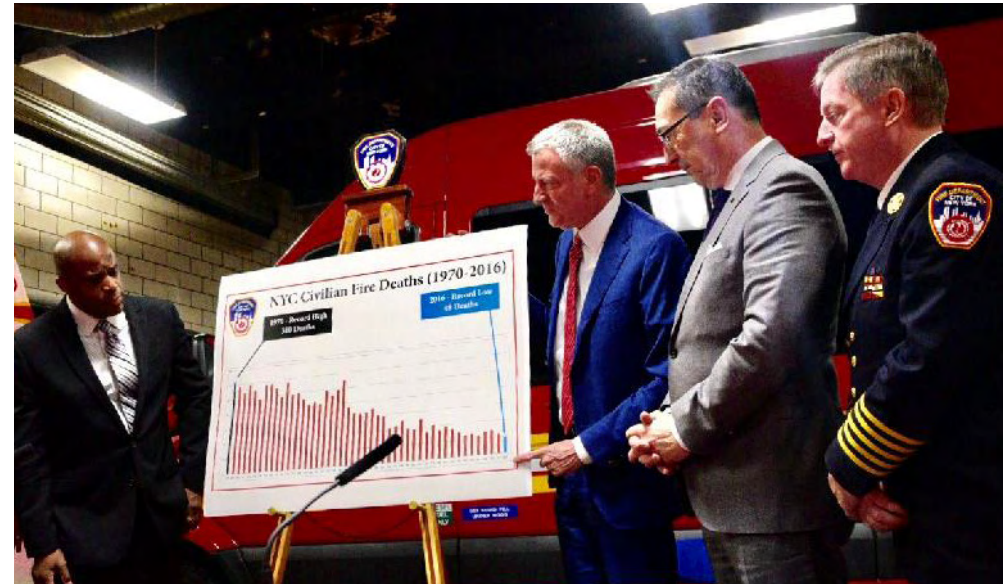
Record low for New York fire deaths

New York Mayor Bill de Blasio and Fire Commissioner Daniel Nigro announced in January that the number of people who died by fire last year in New York City fell to an all-time low of 48, a huge drop that officials credit to a safety awareness campaign, faster response times, and the bravery of members of the FDNY.

"It's absolutely amazing," said de Blasio, who made the announcement at Engine Co. 9, Ladder 6 in lower Manhattan, adding "2016 saw the fewest fire deaths in New York City in any year since statistics were first kept, going all the way back to 1916."

The highest number of deaths by fire was in 1970, when 310 people lost their lives. The numbers have dropped fairly consistently since then, with last year's record a 19% decline from the year before. Some 59 people died in fires in 2015.

For the record, NYC has a population around 8.5 million people in an area of 795 sq km and the FDNY attended 1.7 million calls of all types. That



Mayor de Blasio and Commissioner Nigro show off the consistently falling death rate chart.

Compare that with our own fires statistics: serving a population of 4.5 million, the New Zealand Fire Service attended around 72,800 calls in 2015. Of course local factors are relevant here with New Zealand being a predominantly rural country served mostly by volunteer staff. The figures are interesting nonetheless.

New Zealand fire deaths, from information supplied by the NZFS and the Coroner's office, numbered 38 in the 2016-16 year up 31% up from the 26 recorded in the 2014-2015 year.

Echoing a concern often voiced by all firefighters in both jurisdictions, the message was clear: smoke alarms save lives. In 30 of the 48 NYC fire deaths in 2016, the victims had no smoke alarm, officials said. At the time of writing similar figures were not available for New Zealand.

Firebombing 50 years old

7 he first organised operational firebombing in Australia was carried out 50 years ago, on February 6 near Benambra (N.E. Victoria) by two Alpine Aviation Pawnees. They dropped fifteen loads of fire retardant on a fire ignited by lightning in rugged bush country.

The two aircraft, flown by Ben Buckley and Bob Lansbury, contained the fire until ground crews were able to access to the remote area around five hours later. Prior to this operation there had been several firebombing trials in various locations across Australia, but this is the earliest record of an operational dispatch of retardant or suppressant to a live fire.

Today aerial attack is an integral part of Australian firefighting, and resources resources have increased substantially. Today aerial firefighting has the support of the National Aerial Firefighting Centre which procures and positions a fleet of specialised aircraft each bushfire season for all Australian states and territories.

The 2016-17 aircraft fleet procured by NAFC includes:

- six Erickson Aircranes and a number of other heavy lift helicopters;
- four large fixed wing airtankers (including a DC-10 Very Large Airtanker);
- two fixed wing water scooping aircraft;
- three very fast specialist fixed wing mapping aircraft, equipped with infra-red scanners to rapidly locate and map bushfires.

Note: New Zealanders wii recognise the Pawnee as one of the common early aerial topdressing planes here.

LATEST TORCH OFFERING FROM PSL

Streamlight Vantage® 180 Helmet/Right-Angle Multi-Function Torch

Giving you the ultimate versatility in a firefighter's light, the Vantage® 180 goes instantly from a helmet light to a handheld light to a right-angle light. So wear it, hold it, clip it, or even hang it!

- C4® LED with high and low modes
- Rear LED Taillight changes from blue to white: Blue LED for helmet mount use and visibility in heavy smoke White LED for a downcast flood light to see what's at your feet; switches from blue to white when head is at a 90° angle
- Head articulates 180° to aim the beam
- Custom optic produces a narrow beam with optimum peripheral light

\$120.00 (Price includes GST and delivery)

Available in Orange and Yellow

Orange - SKU:88900, Yellow - SKU:88902

Estimated product delivery end of February 2017.



BUY NOW!

www.pslfireandsafety.co.nz
sales@pslfireandsafety.co.nz
0800 - 10 10 55



Talk it, don't cork it

by John Kingsbury, NZFS

7he acronym 'CISM' has comfortably rolled off our tongues for many years now. Its successor 'CIPSS' by contrast is more of a tongue-twister. However, the name has been carefully chosen to describe more accurately the breadth of psychological support provided for NZFS personee. For those who want a more accessible description, we refer to the programme simply as Staying Well.

CISM, from its inception in the early 90s, rightly recognised the potential trauma for operational personnel resulting from attendance at some unpleasant critical incidents involving injury and death. CIPSS, or Critical Incident and Personal Stress Support, maintains a strong focus on incident related trauma, but also takes into account the personal and workplace stressors that all of us experience from time to time. In this way the programme acknowledges the impact that critical incident stress can have on workplace functioning and home life, and vice versa. The



programme is also able to provide help for Fire Service people in support roles grappling with psychological wellbeing issues.

CIPSS can be best understood as the umbrella term under which a whole range of initiatives and interventions sit. Beyond the invaluable collegial support offered within watches, stations and brigades, the first formal access points for help are peer support and employee assistance programmes. For those who require more specialised and longer duration support, referrals can be made to other professionals like clinical psychologists and psychotherapists. At the next level a small number of people access psychiatric expertise. Other sources of assistance include people like the iwi liaison officers, welfare officers, and chaplains.

For 25 years peer support has been a significant part of the post-incident help available for operational personnel. In keeping with the broadened CIPSS programme peer supporters are now being trained to help with issues like anxiety and depression, drug and alcohol dependency, relationships, and bullying and harassment. Peer supporters are not counsellors; they are a first port of call and are trained on when and how to make referrals for more in-depth help. We currently have about 120 peer supporters, including 40 new peers who are in a supervised probationary period.

Enhanced support programme

Work on the revised and enhanced psychological support programme has coincidentally, but fortuitously, happened at the same time as the introduction of the enhanced medical response programme. I describe firefighters (of which I am one) as practical 'fix-it' people. Extinguishing a fire or extricating a patient at an MVA can readily be viewed as successfully fixing a problem. However, the same cannot be said for attendance at purple calls where about 85% of the patients are deceased, and sometimes occur in violent circumstances. We can't 'fix' death so we need to reframe the language we use about what constitutes success. Success is about timely response, professional demeanour, competent medical interventions, and detached empathy for the grieving family. For the most part we do these things very well.

Those of us who attended this year's UFBA conference in Christchurch heard keynote speaker Sir John Kirwan implore us to talk about our feelings and the things that are troubling us. This is a particular challenge for stoic Kiwi males like farmers and firefighters. He emphasised that

talking openly about problems is healthy and not a sign of weakness. And having these conversations is a first step towards accessing help and commencing recovery. Perhaps, somewhat paradoxically, we actually want to see an increase in the uptake of psychological support – not because of a surge in acute or cumulative disorders, but because more people are seeking support early in order to prevent these things taking hold.

For more information about CIPSS, the names of people you can contact, and resources that you can use, please go to the FireNet page [http://firenet.fire.org.nz/Critical-Incident-and-Personal-Stress-Support-\(CIPSS\)/Pages/default.aspx](http://firenet.fire.org.nz/Critical-Incident-and-Personal-Stress-Support-(CIPSS)/Pages/default.aspx)

John Kingsbury is National Safety, Health and Wellbeing Manager, NZFS.

27 years of deaths haunts Chief

Florida police recently found a Chief Fire Officer dead from a self-inflicted gunshot wound after he posted this on Facebook: “PTSD for firefighters is real. If your loved one is experiencing signs, get them help quickly. 27 years of deaths and babies dying in your hands is a memory that you will never get rid off. It haunted me daily until now. My love to my crews. Be safe, take care. I love you all.”

His demise highlights a situation U.S. fire departments are mounting a campaign against. In 2015, U.S. firefighters and EMTs suffered 87 line-of-duty deaths. According to the

Firefighter Behavioral Health Alliance, 117 suicides were reported the same year for firefighters and EMTs. (Note that reported suicides do not total all suicides).

Jerry Meddock Jr., national outreach manager and instructor for the Firefighter Behavioral Health Alliance, has PTSD and once contemplated taking his life. He admitted himself to the E.R. “Above all, realise you aren’t alone.” For him, networking and learning to not be afraid to speak about his mental illness with others was a huge breakthrough for dealing with his demons.

Outside stressors

PTSD is often coupled with additional outside stressors, he says, including marriage issues, financial issues or dealing with homosexuality in a notoriously macho profession. The combination of high stress and pre-existing PTSD often triggers suicidal thoughts in firefighters and paramedics.

“The current firefighting and EMS culture is an enabler in avoiding PTSD and suicide conversations. Part of being a firefighter or EMT is living up to the expectation of being a hero. It’s easy to forget that first responders are humans too, and that the horrific scenes first responders are subject to witnessing can take a toll on mental health.

“Stigma is a big thing,” says Meddock. “Peers may look at you differently if you admit to suffering from mental health issues.” Some departments threaten to take firefighters and paramedics off the front lines – or worse, fire someone if they suspect or catch wind of mental health issues. These cultural fears inhibit firefighters and paramedics from being open about their mental health, he said.

A growing number of departments are instilling a ride-along programme where counsellors and chaplains respond to calls alongside firefighters and EMTs. This programme helps counsellors and chaplains live the life of a first responder to get a better grip on what issues arise.

Photo:
New York Times



High level proof needed for suicide by fire

by Colin Clemens

7he level of proof required by coroners to prove a suicide by fire is such that the incidence is likely well under-reported. In New Zealand it is a fraction of death causes, while in some countries, it is, by comparison, very high.

A phone call from a colleague in 2014 asking about people committing suicide by fire resulted in a research project and obtaining a Masters degree using this as my thesis. The original question asked if I had noticed an increase in suicides by fire since starting as a fire safety officer in the late 1980s. The answer was a simple 'yes' as over that period suicides by fire had grown from a once every few years event to, in the 2013-14 business year, there were six incidents based on information not verified against Coroners Findings (21.4% of the fire deaths for that year). While that seems a massive jump, it has also to be laid aside a big jump in general violent crime and suicide in general. Maintaining the NZFS Fire Fatality Database being one of my tasks meant, I had this information at my fingertips.

Research revealed there is a relatively large amount of information about the role of self-inflicted death, or suicide, by fire in some Asian cultures, but little information on its prevalence in western cultures. A caveat is necessary in the international studies – what has been argued by one author for one location may be contradicted by another author for another location. The transportability of some data has been brought into question.

A 2011 study by identified that 'suicide by fire' accounts for approximately 1% of all suicides in high income, mostly western, countries. The figure is as much as 40% of suicides in some areas and as high as 71% of suicides in some specific locales. This indicates there may be a cultural aspect to the rate of occurrence of completed suicide by fire; even within developed countries there are indicators that suicide by fire is more common amongst certain cultures or sub-cultures (New Zealand is rated in World Bank data as a high income country).

The rate of suicide by fire in New Zealand is variable. In the period 2007-2008 Business Year to the 2014-2015 Business Year the rate fluctuated between 0.55% and 1.88% of all suicides based on the Provisional Suicide Statistics published by the Ministry of Justice, Coronial Services. The New Zealand case law for a coroner to make a finding of suicide requires a high level of proof. This, combined with the fact that self-immolation deaths may also be recorded as other than suicide because of the level of proof required, means the actual number may be higher than official statistics indicate.

New Zealand Fire Service data on fatal fires was identified as containing inconsistencies against data from other agencies, including the Provisional Suicide Statistics published by the Ministry of Justice, Coronial Services. Changes in data collection and recording in the NZFS have subsequently been implemented. As a result of this research, a number of questions arose about who is completing suicide by fire:

- are there particular cultures or sub-cultures?
- what types of housing stock were damaged by the decedent in completing suicide by fire?
- was there a link to the downsizing of psychiatric institutions and the normalisation of psychiatric outpatients into the community?

Previous New Zealand research identified is at best over a decade old. Several improvements have been made to the system, and more are in the pipeline. Further research is needed to establish if there have been any changes in the contributory factors and patterns of suicide by fire in New Zealand. This would also permit a comparison of New Zealand recent data against recent international studies.

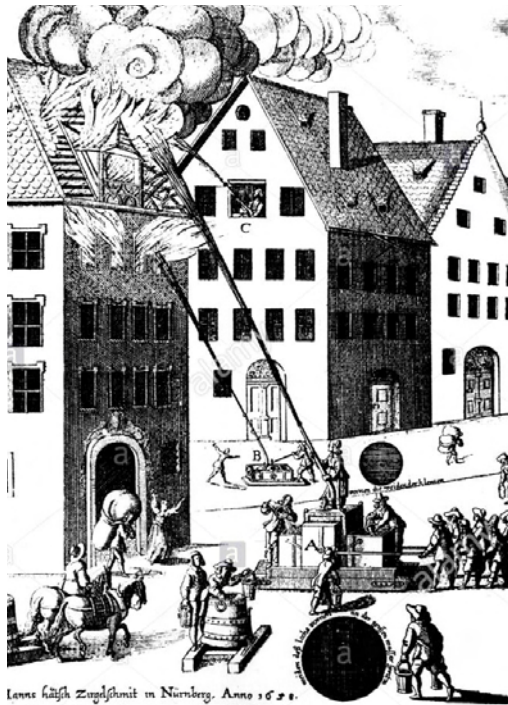
While a large quantity of international information is available for studies on survivors of attempted self-immolation, there exists a smaller quantity of information on completed suicide decedents. The information available does not give any indication on the transportability of information between the two groups. Whereas it appears that most international research focuses on information from family and victims of unsuccessful attempts, this research looks at the statistics on completed suicides by fire. This is a unique approach and one which relies on statistics rather than the 'voice' of the victim and family.

For further information or a copy of the research paper, contact Colin Clemens, Fire Research and Investigation Unit, National Headquarters, colin.clemens@fire.org.nz

Painter father of fire hose

7 he beginnings of the modern fire engine is credited to German inventor/engineer Hans Hautsch who created the first suction and force pump, but the 'fire engines' of the day were still limited by their lack of reach as they tended to have only limited hose attached to the machine. (see below).

The Dutch painter Jan van der Heyden (1637-1712) seems an unlikely



The fixed hose machine had limitations in proximity to a blaze.

hero of early firefighting but he had been fascinated by firefighting since a boy. Also an inventor and innovator, in 1672 he and his brother Nicolaes created a fire engine fitted with pump-driven hoses, which transformed the efficiency of firefighting. He became the father of the modern fire hose, extending the capability of Hautsch's ideas.

His hose, made of flexible leather and coupled every 50 foot with brass fittings (the length is still standard in mainland Europe) allowed firefighters to get right in the face of a fire, or work around it.

His suction hose also did

away with the bucket brigade previously needed to keep a force pump reservoir full.

The illustration at right shows the difference between Hautsch's fixed hose (left) and van de Heyden's new fire hose and pump that could suction from a river or such other source and get very close to a blaze.

van der Heyden not only invented this system but built and sold it, promoting it with a book of prints showing the devastation of urban fires and the advantages of the pump system in fighting them.

In 1672 van der Heyden was put in charge of the fire department, where he reorganised the entire brigade. *Branspuiten-boek* (The Fire Engine Book) was written and illustrated by Jan van der Heyden and published in 1690. The famous book was the first firefighting manual ever published. In addition to serving as the director of the fire department and painting for the likes of Cosimo de' Medici, van der Heyden was employed as the superintendent of the lighting for Amsterdam.

He also designed a comprehensive street lighting scheme that reportedly introduced lamp posts; it remained Amsterdam's street lighting scheme from 1669 until 1849.

Dutch inventor and merchant John Lofting (1659-1742), who had worked



with van der Heyden, moved to London, became a citizen and patented (no 26/1690) The 'Sucking Worm Engine' in 1690. There was a glowing description of the firefighting ability of his device in *The London Gazette* of 17 March 1691, after the issue of the patent.

The British Museum has a print showing Lofting's fire engine at work in London, the engine being pumped by a team of men. In the print, three

fire plaques of early insurance companies are shown, no doubt indicating that Lofting collaborated with them in firefighting.

How many firefighters are fighting fires or involved in salvage or support in this painting from van der Hayden's text book? See page 22 for answer.



Top shelf

Modern House Fires: Effects of Research on Strategy and Tactics.

Knapp, Jerry; Quinn, William.

The article explores topics to the annual seminar hosted by the Underwriters Laboratories (UL) Research Center in Northbrook, Illinois, on March 13-15, 2016 on improving strategies for fire emergency operations. *Fire Engineering*. Oct2016, Vol. 169 Issue 10, p59-64. 5p

As Number Of U.S. Multigenerational Households Continues To Rise, NFPA And CPSC Develop Toolkit To Address Associated Fire Safety Challenges

"Multi-generational households may include older adults, very young children and people with disabilities who require added assistance in the event of a fire," said Lorraine Carli, NFPA's vice president of Outreach and Advocacy. "Home fire safety planning and prevention is critical for all families, but for households with family members who have specific needs or limitations, advance planning is paramount to ensuring everyone's safety." NFPA statistics show that older adults are more than two times as likely to die in a fire as the rest of the population.

International Fire Protection January 2017

The influence of organisational culture on learning lessons: implementing a lessons management life cycle

This paper provides an overview of research into the management of lessons in the emergency management sector to identify what success looks like when implementing lessons management. This research included a literature review, an evaluation of Australian and international emergency services organisations lessons management implementation and case study focus groups of Country Fire Authority members in Victoria. A Lessons Management Life Cycle was developed that is currently being implemented by Emergency Management Victoria. See more at: <https://ajem.infoservices.com.au/items/AJEM-31-01-06#sthash.wseRWIF5.dpuf> *Australian Journal of Emergency Management* 31(1) 2016

If you want more link to the latest hot topics bulletin on the library page of fire net <http://firenet.fire.org.nz/Hot-topics---Knowledge-and-Insights-bulletin/Pages/default.aspx>

LFB's glass ceiling cracked

Dany Cotton used to be an 18-year-old firefighter...today she is London's first woman Commissioner.

It may have taken 151 years of LFB history to get there, but that particular glass ceiling now has a significant crack in it. Her career has been a series of firsts: first LFB woman station officer, first woman to be awarded the Queens Fire Service Medal and no doubt has been the first woman in several senior positions.

One of her priorities since taking the top job on January 1, has been to increase the number of chemical response practices, underlining the fact the city could someday once again be a terrorist target. She is also overseeing the LFB's input into the draft London Safety Plan – a four-year vision for making London the safest global city.

New on the job... Dany (far right) with fellow newbies as an 18-year-old.



Old Mt Eden now luxury apartments

7 he former Mt Eden fire station and municipal chambers have been extensively remodelled in a \$15 million restoration and conversion. Investor Nigel McKenna has converted the Heritage New Zealand Category B listed buildings into six luxury apartments.

Chambers & Station, on the corner of Valley Rd and Sherbourne Rd, has four ground-level apartments sold from \$900,000-plus to just under \$2 million and two penthouse apartments: one in the ex-council building is now for sale, the other is to be retained by WJ Investments.

The project involved a seismic upgrade, new foundations, wall bracing and reinforcing, demolishing a link building and replacing it with an 8m high glass atrium with lift and internal staircases, creating the apartment spaces, removing all windows and doors, restoring and repairing them and installing new double glazing, replacing roofs, developing new outdoor living and garden areas with fireplaces and BBQs, installing air conditioning and fire services and underground car parking topped with 30cm of soil growing a healthy lawn. Original fireplaces were exposed, the council vault was restored and moved to a ground-level apartment foyer, kauri floors were exposed and polished and new American oak floors laid in parts.



The original fire pole was removed some years ago. Apartments in the two buildings were given distinctive, separate themes: industrial for the fire station and classic for the council building.

The 1924 fire station is reinforced in-situ concrete with brick infill panels and steel windows. It ceased operating as a fire station in 1970 and both buildings were then used by the Mt Eden Borough Council. The apartment conversion has sought to retain the character of the original buildings, and work within the structure shells. Marble bathroom walls, high-quality European fittings, designer pendant lighting, Carrara marble bench tops, textured wallpapers and oak cabinetry are some features.



The redeveloped Chambers & Station, including the municipal chamber.

Photo: Barfoot & Thompson.

Bespoke protection for Victory

The 250-year-old *HMS Victory* has been retro-fitted with a bespoke sprinkler system to protect it from the fiery calamity that befell the *Cutty Sark* in 2007 while it was undergoing conservation work.

The National Museum of the Royal Navy and Hampshire Fire and Rescue Service have collaborated on the design. The wooden construction of the Victory, and the fact that it is subject to an on-going programme of maintenance work, puts it at risk.

The flow of air through the ship and its gun ports cause water droplets to be blown away if the usual method of spraying mist is used. The

organisations also had to come up with a design that would sensitively fit into the aesthetics of the ship, and introduce ultra-modern necessity without sacrificing its historic charm and majesty. Every pipe, head and bracket had to be signed off to ensure it didn't look out of place.

Eventually, a system was installed that releases different-sized water droplets on different decks, with the larger, heavier droplets being more resistant to the wind. The total cost of the system, including research, design, development and installation was £1 million.

Photo: *Daily Mail*.



That was a fire truck ...



Absolutely transfixed, a young boy looks at the remains of a 1962 Karrier Gamecock pump from Henderson VFB after it apparently got caught following a wind change at a vegetation fire in 1965. The guys in the background look noticeably disinterested.

JT Diamond Collection, Auckland Libraries

A rhino? ... no problem !

A crew of Edinburgh firefighters have answered one of their strangest ever calls – helping vets treat a two-tonne rhinoceros with toothache. The team is more used to overseeing the lifting of heavy vehicles or debris from collapsed buildings. Eight-year-old Bertus had to be moved before an operation could take place at Edinburgh Zoo. The rhino was anaesthetised by vets ahead of being lifted. Firefighters then had to work out how to winch the greater one-horned Indian rhino into a safe position for zoo staff to work.

10 medics a month hospitalised

7 en ambulance officers a month are being taken to hospital after on-the-job assaults, and St John staff are no longer treating people if they consider the situation dangerous.

St John said its crews were abused nearly 3000 times in 2016. Two-thirds of those cases were verbal, while 30% involved some form of physical and verbal abuse. Of the 65 physical assaults reported each month, up to 10 were 'very serious' and required the hospital or on-going treatment.

In one case an officer was punched, shoved and locked into a room at a rural property and had to escape out a window. In another, a paramedic had a knife held to him and he was told if the seriously ill patient died, so would he.

Paramedic Roger Blume said staff had been threatened, and wanted out. "We have staff who have spent three years at university, got an undergraduate degree in para-medicine, had a passion to do this and they as a result of the trauma; the emotional, psychological and physical trauma from assaults, have left the job." They are increasingly cautious when entering a scene, and were waiting for police backup if there was a threat.

Ambulance Association head Mark Quin said it is an increasing problem. He had to get out of an ambulance earlier this year after being attacked by a patient high

on methamphetamine. Half of the abuse incidents involved alcohol or recreational drug abuse.

The abuse is something staff have almost had to get used to it, he said. "I don't think anyone's desensitised to physical abuse but certainly the verbal side of it, to walk into a house and have demands placed on you and be sworn at told in a degree that's not acceptable – certainly staff have for a while accepted it."

St John CEO Peter Bradley said it would be supporting staff to push prosecutions and helping bring it to court. In 2012 the Government changed the Sentencing Act so assaults on emergency service staff are counted as aggravating factors, allowing judges to treat them more harshly.

Transporting mental patients

Meanwhile, Coroner Carla na Nagara has recommended ambulances have two crew members or a police officer travelling in the ambulance when transporting serious unwell mental health patients. It follows the case of a psychotic patient being cared for in a rural Hawkes Bay community. The patient, who was in a deteriorating condition, could not be seen by a doctor for some hours and so it was decided to take the patient to hospital.



While the ambulance officer was discussing the situation with another crew that had just arrived, the patient left the ambulance and none of the ambulance staff could persuade him back inside. He suddenly darted onto the road, lined himself up in the path of an approaching truck and trailer unit, and was killed on impact.

Firefighters ride, ok!

by Tanya Piejus

Fighting fires and riding motorbikes seem to go together as comfortably as pies and beer, so it was natural that in 1982 a bunch of firefighters in Massachusetts would form a motorcycle club called the Red Knights. News of this new club spread like a grass fire and it went international less than a year later with Canadian members joining.

The Red Knights International Firefighters Motorcycle Club is still growing and now has over 300 chapters and 9000 members throughout the world from Alabama and Australia, to Germany and Georgia, to New York and little ol' New Zealand. The New Zealand Red Knights recently welcomed its seventh chapter, covering the lower half of the South Island.

Tim O'Halloran is president of Chapter 5, which covers the lower half of the North Island and is based at Porirua fire station. He says, "It's a club for active and retired fire service men and women, paid or volunteer, urban and rural. We exist to provide our members with an escape from the stress and pressure of a tough job and to have a few good laughs between awesome rides.

"It's not an elitist club exclusively for fire personnel. We have social members who are partners or family of full members. We also have members who have nothing to do with firefighting, but just enjoy riding and socialising with us as part of our extended family."

Chapters regularly organise social events for their members and, of course, motorbike rides along New Zealand's best roads. Longer rides are often joined by members

of neighbouring chapters and, once a year, a chapter organises an annual gathering of members from all over the country. Last year, Chapter 5 ran the gathering as a fundraiser for Carterton Volunteer Fire Brigade who hosted the club at their station. The event involved social events catered by the station, a ride through the Wairarapa with a poker run and axe-throwing competition, and an auction of donated goodies to raise money for the brigade's new van.

Fundraising and other charity work have been embedded as a core function of the Red Knights since the beginning. Each chapter nominates and votes on the charity or charities it will support and fundraising is an important part of their annual programme. The Red Knights also co-ordinate a Help-A-Knight service that finds accommodation and assistance from local members for riders visiting other countries.

Like the fire services, the Red Knights is a brother – and sisterhood – of like minds with a common purpose and cause. The club always welcome new members and you can contact your local chapter through the following people, as well as finding their pages on Facebook and online.



Chapter 1 – Northland: Russell Rawiri russell.rawiri@police.govt.nz

Chapter 2 – Auckland: Andy Lockyear andylockyear@vodafone.co.nz

Chapter 3 – Waikato and Hawke's Bay: Glenn Anderson glennanderson121@yahoo.co.nz

Chapter 4 – Taranaki: Jason Ansley jason.ansley@fonterra.com

Chapter 5 – Wellington and Lower North Island: Tim O'Halloran tm_ohalloran@yahoo.com.au

Chapter 6 – Nelson and Upper South Island: Ken Mahon kenjanmahon@gmail.com

Chapter 7 – Lower South Island: Phil Candy actioncandy@hotmail.com

Four houses lost in Whitianga blaze

Wind-fuelled wildfire ripped through a peninsula at Whitianga destroying four houses, and some structures at the Wilderlands commune.

The multi-front blaze took several days to totally extinguish, despite the attention of 30 firefighters and several helicopters. Out-of-district crews were rostered through Whitianga for some days after to keep an eye on hot spots.

Amy Hodge's home became a refuge for about 25 people and her back lawn became a heliport with choppers landing or hovering to refill their monsoon buckets loaded with foam that was dumped on the 70 hectares of fire-ravaged scrub. Fire tankers were filled and unloaded into a pool at a property up the road to be dispersed by ground crews.

Principal rural fire officer Paul Shaw had feared other houses were at risk as a south-westerly fuelled flames on the first night, but a great job by



the helicopters dumping water had kept them safe. "We had to pull the helicopters and the ground crews out overnight. It was too dangerous. Sadly the wind didn't give up and there was plenty of volatile fuels in here."

In the midst of the devastation he found an untouched house. "The lawn and all the gardens are looking lovely and five metres over the hedge is a lot of smoke rising from smouldering material – this house is one of the lucky ones."

Photos: *Stuff*



30 firefighters killed in Tehran building collapse

7 ehran firefighters wept openly in the street, holding each other for support amongst the dust and the debris of a collapsed high-rise in which at least 30 of their comrades died on January 19. The iconic 17-story Plasco building, Tehran's first high-rise, caught fire and then collapsed. Authorities said they had repeatedly warned tenants about blocking stairwells with fabric from cramped garment workshops on its upper floors.

Firefighters, soldiers and other emergency responders dug through the debris into the night, looking for survivors. While it was not clear how many people were in the steel-and-concrete building, witnesses said many had slipped through a police cordon while the fire burned to go back inside for their belongings. "Firefighters went inside to bring them out, and then suddenly the building collapsed," said witness Masoud Hosseini.

Firefighters began battling the blaze around 8am, some 3 1/2 hours before the collapse. The fire appeared to be the most intense on the upper floors, the site of workshops where tailors cooked for themselves and used old kerosene heaters for warmth.

The building came down in seconds. One side collapsed first, tumbling perilously close to a firefighter operating his tower platform (see pictured at right). The fire is the worst in Tehran since a 2005 blaze at a historic mosque killed 59 worshippers and injured nearly 200 others.

Photos: AP, Getty, ABC



Hobbits impress again

7 he Hobbits made an impression again at the World Firefighter Combat Challenge World Finals with top times gaining admission to the elite Lion's Den for some.

Eight members of Team Hobbit New Zealand ran at the championships in Montgomery, Alabama. Te Awamutu's Deane Mark achieved his Lion's Den time in his first run – Te Awamutu's Ian Campbell also qualified for this exclusive club later. Whanganui's Tanja Grunwald from Whanganui also excelled with a second placing in the +40 women category.

Tom Reid qualified for finals day in the 60+ Individual class and also ran tandem with Jacques Bretton to qualify for the finals and a relay event with some 'really old' firefighters – with a total of 200 years experience! Putting down a personal best time of 2:06.53, Tom was awarded the bronze medal. The tandem team ran a time of 1:59.88, placing second.

The team was: Neil Gardiner (Takaka), Tom Reid and Scott Cubitt (Christchurch Airport), Deane Mark and Ian Campbell (Te Awamutu), Anna Alexander (Te Awamutu), Geoff Curle (Sumner) and Tanja Grunwald (Whanganui).

Top firefighters honoured

The Italian Fire Departments that provided aid during the series of earthquakes in central Italy in the summer of 2016, have won the coveted Conrad Dietrich Magirus Award together with the title 'International Firefighting Team of the Year 2016'. São Paulo metropolis was among the top three teams, as was Altenmarkt, Austria with only 840 inhabitants.

The award for National Firefighting Team of the Year went to the Volunteer Fire Department from Lehrte, Lower Saxony, Germany for a demanding rescue operation on the A2 motorway. The Volunteer Fire Department Erkrath in North Rhine-Westphalia, Germany earned the Special Prize for Social Commitment.

Flying Dubai firefighters

What started out as a leisure activity, flyboarding has been taken up by Dubai's Civil Defence.

Using the new Dolphin system, a firefighter responds at high speed by jetski, then strapping on the flyboard pack and using pressure supplied by the jetski, can hover to quickly reach incidents that are difficult to access, such as on busy traffic bridges, ships or shoreline facilities.

Meanwhile, New Zealand's Martin Jetpack has been working with Dubai on the multi-million dollar supply of 20 jetpacks, which can fly at a top speed of 72kmh and to an altitude of 330m. They have rotary helicopter blades fixed within a special housing. Rudders beneath these can be angled in order to control airflow and, therefore, movement in flight.

Both systems will go a long way to circumventing Dubai traffic.



How many firefighters are fighting fires or involved in salvage or support in the painting from van der Hayden's text book ?
(42)

Five firefighters killed in Chile wildfires

7ive firefighters have died and several injured fighting vast woodland fires that continue to burn in the centre and south of Chile. President Michelle Bachelet called it “the biggest forestry disaster in our history.” About 4000 sq km had been burned by the end of January, mainly in sparsely populated rural areas.

Although most of 150 fires that broke out this summer season were under control or extinguished, 48 are still raging at the end of January. Soldiers and dozens of aircraft have been brought in to help. Nasa images showed a brown plume stretching about 300km along the

Pacific seaboard, originating from clusters of fires around Pichilemu and Constitución. Forty-three people have been arrested for allegedly starting fires that have wiped out Chile’s wine industry and 1000 structures.

In the central regions of O’Higgins and El Maule, the fires were considered the worst in the past 50 years, and a state of catastrophe has been declared for them. Fires are common in Chile’s parched woods during summer. Most are caused by human activity. The past year is considered worse because of a drought that has built up over the past eight years, attributed to climate change. A 10-day run of high temperatures also contributed.

More than 5000 firefighters, including international teams and aircraft, are fighting the flames.

New Deluge Monitor throws 152m

Ferrara unveiled a pump last month that’s been four years in the making. Developed by Ferrara Fire Apparatus and U.S. Fire Pump, it will act as a backup water supply when fire departments are battling large fires or during emergency response situations.

The pump connects to a water source, such as a lake or pond, then water is fed through several metres of hoses connected to the new Deluge Monitor Truck.

It can shoot water from 152m away from a burning building, with a water flow of more than 60,566 litres per minute.



A young man tries to comprehend the future after his town was wiped out. Photo: AP



oooooooPPPPs

A firefighter drained the water supply of a small South Island town after filling up a school swimming pool, leaving the town without water to fight fires and affecting the drinking water supply.

The CFO said other water options were available, including a 30,000 litre tank and a dam behind the school. Using the hydrant to fill up the pool reduced chlorine levels and pH levels in the town's water, creating a public health risk.

It took about 12 hours for the reservoir to get back to normal levels. It was believed that taking little amounts at night wouldn't affect the reservoir too much. "Obviously it does," said the CFO. "I didn't know the amount we could take out of it. We've all learnt lessons."

A letter was sent to the Fire Service from the local council advising it of concerns around using the hydrant, and the school was sent a bill for the water used and investigation costs when it was initially believed there was a leak.

However, according to the school, the pool is now looking "absolutely fantastic".

Welfare society on app

The Firefighters Welfare Society has its own app for smartphone and tablet users? It can easily be downloaded from the apple app store or goggle play store – just search NZWFFS to upload the app.

With these apps you can check the availability and book online the Welfare Society's holiday homes. To access the holiday homes you must be a registered member of the New Zealand Firefighters Welfare Society. Bookings are available up to one year out from the current date.



For anyone interested in becoming a member of the Welfare Society please go to our website www.firefighters.org.nz and complete an on-line application form and then you will be able to take advantage of the benefits that are available to you, including our six holiday homes.

Yarnell Hill fire still festers

Former Hotshot supervisor Fred Schoeffler has sued the federal government over the 2013 Yarnell Hill fire, saying records are being concealed. He is seeking aircraft radio transmissions that may help explain the deaths of 19 elite firefighters in the fire.

In his lawsuit, Schoeffler says the U.S. Department of Agriculture has denied a public-records request for recordings and transcripts of Forest Service radio traffic among employees who were conducting an aerial firefighting study during the fatal blaze.

The Granite Mountain Hotshots firefighting team had been in a relatively safe position on a ridge top. For an unknown reason and without notifying anyone, they moved down the mountainside through an unburned area where they were trapped by a wall of flames when winds shifted the fire in their direction.

Twelve of the 19 families have settled with the State of Arizona for \$50,000 damages each, but all still want an answer to the question of why the team moved directly into danger – against all training.

The photograph below was recovered from the camera of one of the deceased – it was taken just before they left the safety of the ridge.

