

# IGNITE

**Te Hiringa o te Tangata** Issue 28 / Winter 2023 / Takurua 2023

**DEPLOYMENT TO CANADA**

**CELEBRATING THE APPEARANCE OF MATARIKI  
IN THE SKY AND THE START OF A NEW YEAR**

**GROUNDBREAKING FIRE  
WHIRL RESEARCH**



**Ignite is the official magazine for Fire and Emergency New Zealand.**

Te Hiringa o te Tangata – To have drive, zest, determination. To have heart and soul.

Ignite represents the voices of the people across the country who dedicate themselves to protecting life, the environment and property in their communities.

It is produced by the Fire and Emergency Communications Team, National Headquarters, Spark Central, 42–52 Willis Street, Wellington 6011.

**Contributions to Ignite**

Contributions to be considered for publication are welcome and may be submitted to: [communications@fireandemergency.nz](mailto:communications@fireandemergency.nz)

Photos need to be at least 1MB.

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# Kia ora koutou

Each edition of Ignite provides a snapshot of all the mahi that is happening across our organisation – sometimes it's an opportunity to celebrate and occasionally it is a chance for us to reflect on tragedies.

Just a week after the last edition of Ignite was released, our people responded to the devastating property fire at Loafers Lodge in Newtown, Wellington. A once-in-a-decade fire, this tragically claimed the lives of five people and injured many others, making it the largest fire fatality fire experienced in New Zealand since the late 1980s. This event reminds us that our purpose to protect and preserve lives, property and the environment is as important as ever. What's more, we can't achieve this without the dedication and commitment of our people. Everyone who played a part in this response deserves nothing short of the highest commendations.

While we have certainly been busy responding to major events on home soil, we are always willing to help our international partners in their time of need. Page 4 onwards covers our deployment of 90 personnel to Alberta, Canada to help fight the extreme wildfires that continue to rage through the region. There is no doubt our people have been doing Fire and Emergency, and Aotearoa, proud through their sacrifice and dedication, which has not gone unnoticed on the ground. On behalf of all of us, thank you.

As the climate warms and major wildfires become more common, our people need to be equipped and ready to handle these types of events. In June, we assisted with groundbreaking research in which a deliberate fire whirl was created in the field. Having safe and managed exposure



to the fire whirl was an invaluable training opportunity, giving our people insight into how they form and how they can be managed. You can read more about this fascinating work on page 8.

After a busy and, at times, tough past few months for the country and for our people, it was timely over the Matariki period to take a step back, reflect on the past 12 months and remember those who have passed. Across the motu, our people celebrated Matariki in fire stations, offices and community spaces, coming together for dawn hautapu events and sharing kai. It has been great to see so many people embrace this new holiday and honour traditions of te ao Māori. More details on Matariki events are covered from page 20.

Of course, these are just some of the highlights of our mahi over the past few months and there are many other great stories within this edition, such as the incredible results being seen by the 'You're Cooked' campaign (page 12), showcasing the amazing work we do at the emergency services expo (page 18), and orders placed for new aerial appliances (page 26). What's evident across these stories is the huge amount of work we do to keep New Zealanders safe – whether that's through responding to major events or educating for prevention. Thank you once again for being a part of that critical service.

Ngā manaakitanga.

**Russell Wood**  
Acting Chief Executive

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'Both Alpha and Bravo are doing Fire and Emergency and their country proud with the mahi they have been putting in, with the Canadians commenting daily on how productive the Kiwis can be'.

— Agency Representative Scott Marchant



Assessing best options around hangups

Alberta is around three times the size of Aotearoa and hot, dry conditions throughout the province are helping to fuel the well over one million hectares of active fires currently burning in the province.

Our crews provided support to the communities in the path of fires which included securing the active fire edge, mopping up, digging out hotspots, cutting fallen branches, clearing access tracks and escape routes, making helipads and all other jobs as necessary.



Alpha returning home

**'It feels good to know we made an impact there and helped people and the fire brigades there. Knowing you are helping people is a good feeling'.**

—Tim Rowe, Canterbury Rural Fire Officer

Wildfire Management Specialist Jamie Cowan, who spent some time as our Agency Representative in Canada, says that the task at hand is a challenge to our people who are confronted with unfamiliar terrain and wildlife, but those deployed are well prepared and highly skilled.

'All personnel deployed to Alberta this year at minimum must have been deployed on a wildfire to Australia. This is to ensure they have both the skills and the endurance to deal with a 36-day deployment.'

The hard mahi (work) that our deployed firefighters are putting in in Alberta is beneficial not only to the communities that they are assisting in Canada, but the skills and experience gained overseas will be integral when they return to their own brigades in Aotearoa.



**'They come home with heads held high and a boost to their confidence and self-worth. This is my tenth international deployment and I have witnessed the personal growth with so many people who are involved in these experiences'.**

— Jamie Cowan, Agency Representative



# DEPLOYMENT TO CANADA

**Since May, we have deployed a total of 90 personnel to Canada at the request of the Canadian Interagency Forest Fire Centre (CIFFC) to assist with helping fight extreme wildfires raging across the western province of Alberta.**





'It has been my greatest honour and privilege to serve Canada and New Zealand as part of the Kiwi-Bravo Team. I'm proud to have worked with so many like-minded, passionate and extremely skilled people from other countries across the world to make a difference during these catastrophic wildfires Canada has been suffering. My heart goes out to all the impacted and lives lost through the fires and I send my strength and bravery to those who continue to help and support the transition to recovery'.

— Natalie Powell - High Country Fire Team, Canterbury.



'It was an honour to be able to represent New Zealand and go over to help our brothers and sisters. The scale of the fires over there is next level. There was a lot of camaraderie between all the firefighters – Canadians, Australians, South Africans, Americans, and us'.

— Josh Paice, Taranaki Rural Firefighter



Bravo



Sonya Porteous with messages from Spirit of North Community School to the Paskwa Firefighters



Receiving deployment kits



Charlie



Hotspot cluster



# GROUNDBREAKING FIRE WHIRL RESEARCH

## Fire and Emergency assisted with groundbreaking fire whirl research in Twizel in June.

In a world first, scientists from Scion, US Forest Service, University of Canterbury's School of Earth and Environment, and the US National Centre of Atmospheric Research (through a Fulbright Fellowship) successfully generated fire whirls on slash piles.

The activity was part of research aimed at protecting firefighters and communities from the devastating impact of future wildfire events.

Fire whirls/vortices, or fire tornadoes, occur during extreme wildfire events around the world but, until last month, they have never been deliberately created in the field and at this scale.

Scion science lead Shana Gross said the experiments were designed to isolate the fire whirl outside a wildfire and study the factors that cause fire whirls to form.

**'This will help us to identify "watch out" signals for firefighters that indicate when a fire whirl is ready to form.'**

A total of nine wilding pine slash piles of various sizes were burned over four days.



After igniting the slash pile 20 metres in diameter, the research team was able to generate a 'smoke devil' that then took up the flame and generated a fire whirl. This whirl was the longest sustained whirl achieved during the research trials.

Fire and Emergency has a strong relationship with Scion, which was a key factor in locating the research in New Zealand, alongside the landowner's support and favourable experimental conditions that factored in topography, weather, and vegetation.

Mid-South Canterbury District Manager Rob Hands says Fire and Emergency provided operational support during the field work, with crews from several local volunteer brigades and the Department of Conservation onsite for each burn, helping to extinguish the piles once the scientists finished their monitoring and assessments.

**'The burn days also provided us with valuable training opportunities, giving new team members exposure to incident management.'**

# TOUGHEST TWO MINUTES IN SPORT

**You wouldn't be able to tell that nerves had kept Queenstown Senior Firefighter Claire Jones up the night before her stellar run at the UFBA National Firefighter Challenge in May this year. Her performance landed her in fourth place in the individual female open category – only missing out on the bronze medal spot by tenths of a second.**

Claire says she gets really nervous before doing the run.

'I put a lot of pressure on myself because it's just an individual event with you against the clock. I just get super nervous and pent-up energy and then once it's over you obviously feel great about it.'

The UFBA National Firefighter Challenge is an annual event, dubbed the 'toughest two minutes in sport', which sees firefighters from around the motu (country) compete against each other and the clock in a rigorous series of tasks.

**Competitors are faced with climbing a six-storey tower, hoisting a 70 mm hose coil up the six stories, using a 4 kg shot hammer to drive a beam, and finally, dragging a life-sized dummy over 30 metres – all while wearing full bunker gear and breathing from a BA set.**

Claire says physically, it's one of the hardest things she has done as an individual.

'I was pretty exhausted at the end; when that dummy came over the line it couldn't have been quick enough.'

The challenge is not only physically one of the toughest things an athlete can put themselves through, but, says Claire, the mental side of the task at hand is a key part of their preparation.

'Individual sport is quite new to me so the mental side of it I'm trying to read up on and get a better understanding of to try and control those nerves.'

Despite what may sound like a daunting task, Claire says that the uniquely encouraging environment of the challenge makes it like nothing she's ever competed in before.



Image credit: UFBA



**'Everyone's around the side-line watching and everyone's cheering no matter how well it's going and it's competitive but not against each other.'**

She's particularly grateful for the support of her Queenstown teammates, who have competed beside her throughout the year, maintaining that they are the reason she has achieved such a resounding success.

Now it's on to the world championships later this year in Florida for Claire, her individual time of 2:57.70 sufficient to qualify her for the coveted 'Lion's Den' – an exclusive club that only 12 Kiwi women have been quick enough to qualify for.

Hoisting herself into the Lion's Den means a few more months of intense boot-camp style training alongside her Queenstown compatriots, who are committed to helping her get across the line in the United States come October.

**The NZ Firefighters Welfare Society's 12 most commonly asked questions:**

**1. Who can become a member?**

Membership is open to all career and volunteer firefighters of Fire and Emergency New Zealand, as well as any person that has a close association with Fire and Emergency. This includes all support and administration staff, along with family members over the age of 19.

**2. Who does my membership cover?**

Membership covers yourself, partner, and children up until their 19th birthday.

**3. What is the cost?**

\$10.00 per fortnight until the age of 65 then \$5.00 per fortnight.

**4. How can I pay?**

Payments can be arranged through a deduction from your Fire Service payroll or via Direct Debit.

**5. Can my children become members?**

Once your child reaches 19, they can join in their own right and enjoy all the benefits.

**6. If I leave Fire and Emergency, can I keep my membership? What happens?**

Your membership can continue once you leave Fire and Emergency. If you are paying through Fire and Emergency payroll, please contact the office on **0800 653 473** and we can help you set up a direct debit.

**7. Am I eligible to join Healthcare99?**

All members of the NZ Firefighters Welfare Society are eligible to join Healthcare99 and add their family members if they wish. This is at an extra cost to the NZ Firefighters Welfare Society standard membership – visit our website for more information.

**8. What is the best way to contact the office?**

Call **0800 653 473** or email [office@firefighters.org.nz](mailto:office@firefighters.org.nz). Alternatively there is a 'Get in touch' form on our website, which comes directly to the office.

**9. How do I access the discounts?**

When you join you will be given a login and a password. Once your membership payments become active, you will be able to access the exclusive discounts available through our phone app.

**10. How do I book a holiday home?**

Homes can be booked six months in advance for up to seven consecutive nights. We do not run a ballot. It is first in, first served. Bookings can be made through our website or app. Alternatively you can contact the office. Once your booking is complete you will receive a confirmation email.

**11. Who can book holiday homes?**

Only financial members of the organisation can book holiday homes (during the booking period the member or partner must be in residence at the home).

**12. What happens to my membership if I die?**

For those members aged under 65, our Funeral Benefit is paid to the person you have elected on your membership. All widows are offered 12 months free membership.

**You can contact our office independently for support – you don't need to go through a Station Rep or Board Member.**

**Please call us on 0800 653 473**



# DRONES HELP AVERT POWER LOSS DURING CYCLONE

**During Cyclone Gabrielle, our Unmanned Aerial Vehicles (UAVs) – commonly called drones – helped to identify an electricity network failure point that would have likely caused the loss of power to around 10,000 Hawke's Bay customers at a time when it was needed the most.**



Station Officer and Urban Search and Rescue (USAR) Squad Leader, Tom Kiel, said he was part of the Fire and Emergency Taskforce working alongside Civil Defence, New Zealand Defence Force, and other agencies in response to the devastation in Hawke's Bay.

'Power distribution company Unison, which supplies electricity to Napier, Hastings, Taupo, and Rotorua, sent a request through for assistance to check for potential issues on their power lines caused by the cyclone damage. When these requests come through, we assign them as 'taskings'. Generally, low-flying helicopters would be used but drones are safer and more efficient.

'We had 36 operational taskings for the drones, so we had to look carefully at what to prioritise. As Unison is a power company and is responsible for supplying to critical infrastructure such as hospitals and this was a national emergency, the tasking was prioritised appropriately.'

Station Officer and National USAR Operations Manager Matt Alphors was also involved in the tasking and said Unison sent through the specifications they required to enable the power lines to be inspected. As the resources needed were not available in Hawke's Bay, a team of two was flown down to Napier from Auckland. This team reported to the Air Base at Bridge Pa, which was co-ordinating all aviation assets, including helicopters and drones.

'There are two operators involved with the use of drones: one flies the drone and the other views the thermal images the drone takes on a tablet screen. If an image shows the temperature is hotter than it should be, then we know we have an issue and that is what happened in this case.'

Asset Analysis and Solutions Engineer for Unison, Bernard Greenwood, said the drones patrolled two of Unison's high voltage power lines that were significantly loaded during the emergency situation, and were supplying all of Napier's energy requirements. This was an unusual occurrence as Napier was normally supplied by five high voltage lines.

'The drone team found two hot connection points on one of the high voltage lines. In just two days, there was already a significant temperature difference of almost five degrees between these connections. A week later,



the temperature difference had risen to 25.2 degrees. Typically, we wouldn't expect more than a 10-degree difference between connections. Due to these findings, the connection was promptly scheduled for replacement by our live-line crews, without the need for an outage.'

**'Discovering this critical issue before it failed helped us avoid a major outage that would have cut off power to Napier customers for hours. Thanks to the assistance of the drone team, we were able to swiftly locate and fix the problem, ensuring a steady and dependable energy supply to Napier during a challenging period for the community.'**

'Unison would like to thank Fire and Emergency and their teams for the vital services provided as it helped ensure reliability and confidence in Unison's network during the cyclone recovery when we were operating in a very abnormal state.'

Launched in November 2022, You're Cooked campaign aims to prevent house fires by encouraging the 'Disengaged' audience cooking while impaired by either drugs or alcohol to 'stay off the stove'.

The 'Disengaged', who represent 20% of the population, are much more likely to leave their cooking unattended or cook under the influence of drugs or alcohol. This audience is hard to reach with traditional messages and channels. They don't like being told what to do, don't recognise fire safety as an issue and any perceived lack of authenticity is an immediate turn off.

The results, measured via our always-on tracker six months since the campaign's start, met or exceeded all objectives set. In fact, the shift in the behaviour metrics is more than four times the target, showing a marked change in our audience's mindset and behaviour. In just six months, we've seen:

- an increase in agreement that cooking while drunk or high is a high/extreme fire risk among the Disengaged from 67.8% pre-campaign to 72.3% post-campaign (+5 percentage points/pp). Target was +5pp in 12 months.
- a decrease in claimed behaviour of leaving frying food unattended among the Disengaged from 51% pre-campaign to 30% post-campaign (-15pp). Target was -3pp in 12 months.
- a decrease in leaving stovetop cooking unattended among the Disengaged from 34% pre-campaign to 19% post-campaign (-21pp). Target was -5pp in 12 months.
- a drop of -7.5% in unattended cooking incidents in Jan-Feb 2023 versus the same period over the past five years.

# YOU'RE COOKED SERVES UP RESULTS

14,000,000 campaign impressions	2,200,000 completed video views
650,000 TikTok views	3,000 social media shares/ engagements



## Why is this campaign working?

**The strategy is strongly grounded by audience insights** – we understood there were too many barriers to get the Disengaged to install smoke alarms or create an escape plan, so we focused on prevention behaviours that required no 'extra admin'.

**The campaign idea was tested with the Disengaged** – this allowed us to get the call-to-action right and understand that the recipes would be the key driver of behaviour change.

**We are meeting the audience in their territory** – we use their language, i.e. 'cooked', we show up in the right channels and we acknowledge the use of drugs and alcohol (without judgement). While some of you may not have seen the campaign outside of Fire and Emergency, this is a deliberate part of our strategic targeting to a very specific audience, which is clearly a winning strategy in this case.

**Our people** – it's important to acknowledge the mahi (work) of all our Community Risk Management teams, including Community Readiness and Recovery Advisors and Risk Reduction Advisors, for helping deliver the 'You're Cooked' messaging to their communities. Some of them went above and beyond, and we've loved receiving your feedback, such as:

'I must say that in the 17 years that I've been around, this "You're Cooked" campaign and the collateral with it is probably the best we have had for events such as these. The signage/stand/framework are perfect – looks professional and carries the right messages! It was a great couple of days, and we had hundreds if not thousands of interactions with the students.'

— Kevin Holmes, Community Readiness and Recovery Manager, after overseeing O-Week activations that featured You're Cooked.

## It's now an award-winning campaign

In late May, the campaign won four GOLD awards at the PRINZ Awards 2023. The PRINZ awards recognise outstanding mahi by public relations and communications professionals across Aotearoa New Zealand. They celebrate the full range of communications, including media, marketing, internal communications, digital and social media. 'You're Cooked' was nominated across four categories, winning Gold for Marketing Communications, Best Experiential and Activation, Best Use of Digital and Social Media, and Most Innovative Campaign. Ka rawe (awesome)!

# NEW FIRE AWARENESS AND INTERVENTION PROGRAMME ROLLOUT A SUCCESS

## Ahi

In te reo Māori, 'ahi' means 'fire'. In Māori culture, fire was originally obtained by Māui from Mahuika, the Māori wāhine atua (goddess) of fire.

## Kura

While commonly associated with schools and places of learning, 'kura' also means 'precious gift'. Traditionally, kura referred to the red feathers that were worn by rangatira (Māori chiefs) and, over time, the meaning of kura has come to be associated with treasured possessions and heirlooms.

# AHIKURA

Weaving together 'ahi' and 'kura' gives us a very special name that represents the idea that taiohi (young adult) and fire are both precious gifts. Through our programme, taiohi and their whānau learn about fire education and the responsibilities that come with this taonga. And through connection, education and support of our programme, we help taiohi and their whānau to grow their own taonga of confidence, resilience and mana.

The Community Programmes team has been out and about across the motu (country) to introduce our people to Ahikura Whānau-Centred Fire Education. Replacing the long running Fire Awareness and Intervention Programme, it involves redesigning how we administer the programme, updating content, administration systems and processes, and providing support to our people in promoting the programme to referrers and communities.

The guiding principle behind Ahikura is based on the whakataukī (proverb) 'Ko te tamaiti te pūtaka o te kaupapa', which emphasises the need to nurture and care for each taiohi in their uniqueness and their wholeness. This approach sets the tone and direction for every engagement with taiohi, whānau, community and our people.

'This is what makes Ahikura different from Fire and Emergency's other youth fire programmes, such as Get Firewise and Maui-tinei-ahi, which works with taiohi as a group in a classroom setting,' says Sarah Grant, Senior Community Programmes Specialist.

'The workshops were also a great opportunity to celebrate the skills of our practitioners, who are passionate about the mahi they do with their communities.'

Ahikura takes a holistic approach to understanding what has led each taiohi to our programme by considering their home situation and what's going on for them at kura (school) or with friends. The approach and content used for each taiohi and whānau is different depending on their age, cultural background, past behaviour and learning abilities.



'I was grateful for the opportunity to attend the Ahikura Conference. As a complete newbie, I wasn't sure if I would understand the content or add any value. I couldn't have been more wrong, and I thoroughly enjoyed the experience and opportunity to work with practitioners to better understand how I can support them as District Coordinator.'

— Tangonui Kingi, Senior Advisor Community Readiness and Recovery

'The Te Hiku Ahikura Conference was an awesome opportunity to meet the existing and future Ahikura practitioners in our Region. We listened to some very passionate and inspiring speakers, got to go through the new resources and share our hopes and dreams for the programme. It was great to meet our future practitioners and make a plan on how we will work together to promote the programme in our District.'

— Laura Lindsay, Senior Advisor Community Readiness and Recovery

'The Ahikura conference reignited the passion to support our taiohi using the Ahikura programme. Making the programme more centred on the whānau rather than the individual will allow us to make sure the entire whānau is safe and respect the ahi around us.'

— Grant Marshall, Practitioner







L to R: Council Member Shaun Pilgrim, President Pete Douglas, Vice President David O'Sullivan, Council Member Jean Barr, Secretary Scott Lanauze (inset).

# ASSISTING FIREFIGHTERS WITH THEIR KNOWLEDGE AND SKILLS

The New Zealand Fire Brigades Institute (NZFBI) was established in 1931 and encourages and promotes the technical training of members of fire brigades and other related organisations.

Pete Douglas, President of NZFBI and Senior Station Officer at Roslyn Fire Station, says NZFBI helps firefighters advance their knowledge and skills in a few ways.

'We provide field days, which are training events based around technical firefighting knowledge and operations, qualifications through the Institution of Fire Engineers (IFE) diplomas, and a \$10,000 scholarship that allows the recipient to travel and study. Study includes courses recognised at a university or training establishment, or a secondment at an overseas fire and emergency service to gain first-hand experience of an initiative that is unique or project that might well be applicable in New Zealand.'

'To further the development of members, we also provide the opportunity to undertake research or study in a field of interest that will have benefits not only to the recipient, but also to those who work in fire and emergency-related sectors.'

Pete says the IFE examinations include certificates covering Fire Science, Operations and Safety, Fire Engineering Science, Fire Service Operations and Incident Command, Aviation Fire Operations and more.

If you are interested in learning more about the NZFBI, visit their website at [nzfirebrigadesinstitute.org](http://nzfirebrigadesinstitute.org)



# HIGH PRAISE FOR INCIDENT AND LEADERSHIP DEVELOPMENT COURSE

'Targeted, personalised, informative, and delivered to a high standard' is how Waitematā Group Manager Katie Pocock describes the Incident and Leadership Development Course, which she attended at the National Training Centre in Rotorua.



The two-week full immersion course is aimed at all Fire and Emergency frontline career officers and designed to provide a mix of leadership and self-awareness in the first week, followed by incident management refresher training using a simulation suite in Week 2.

Katie says while two weeks seemed a 'bit daunting' to be away from her young family, it soon became clear to her that this commitment was necessary and totally worthwhile.

'I had heard really good things about this course, so I did have high expectations going in. I was really impressed with its organisation and structure, and the quality of accommodation. It was an adult learning environment and it brought out the best in the attendees.'

'It was so great to connect with operational leaders from right across the organisation. I also enjoyed the day at the marae – learning about the history of New Zealand from a Māori perspective was really insightful, challenging and powerful.'

Chris Power, Senior Station Officer and Senior Trainer, Officer Development says the course has been running since June 2019 and approximately 276 of our career frontline officers, nationally, have attended.

'The course evolved from what was the Tactical Command Course as Fire and Emergency decided we needed to include some leadership and soft skills training. A course cohort consists of four Senior Station Officers

and eight Station Officers, and Communications Centre supervisors are also eligible for the course. The facilitation team for each course consists of four Executive Officers from around the country.

'We recently had members of the New Zealand Army attend and we have had interest in the course from Australia.'



Senior Station Officer at Auckland City Fire Station Darren Gussey has also attended the course and says he found the course environment one of 'positivity and camaraderie with a few laughs along the way'.

'Like most Fire and Emergency courses I have attended, you walk away having made a few new friends. I like the fact that the people attending the course are from all parts of the country, which enhances the learning environment and made watching the rugby in our weekend off more enjoyable.'

'I also enjoyed the day at the Ōwhata marae where we participated in the Wall Walk, which is an insight into New Zealand history and the relationship between Māori and the Crown. The Kaumātua were welcoming and very humorous.'

To find out more about the course, contact [Chris.Power@fireandemergency.nz](mailto:Chris.Power@fireandemergency.nz)

# SHOWCASING WHAT WE DO AT EMERGENCY SERVICES EXPO



After a two-year hiatus due to COVID-19, the Emergency Services Expo returned to The Museum of New Zealand Te Papa Tongarewa earlier this year. Fire and Emergency was in good company at the expo, which also included demonstrations from New Zealand Police, the New Zealand Defence Force, Wellington Free Ambulance, the National Emergency Management Agency (NEMA), Land Search & Rescue (LandSAR), and more.



This was the sixth expo held, and it was the biggest one yet, with up to 15,000 people attending. Thankfully, the weather held out, and all the outdoor demonstrations were able to go ahead. Some of these demonstrations included a live kitchen fire demonstration, a level 3 lines rescue and a vehicle extrication. Our Urban Search and Rescue (USAR) team demonstrated the equipment they use when responding to an emergency. Attendees were able to sit in the fire trucks, spray the hoses, and have a play with USAR's 360-degree search camera.

Wellington Community Risk Manager Phil Soal said the purpose of the event is to showcase to our community what emergency services we have and how we work.

Fire and Emergency displayed hoses, trucks, an aerial appliance, ropes, and some specialist equipment such as concrete saws, drones, and search cameras within the USAR tent.

Station Officer and USAR Squad Leader, Tom Kiel said having this equipment out and demonstrating what it can do raises awareness of our capabilities.



'It gives the public reassurance that we'll be there when they need us.'

Our Escape My House stand featured a virtual reality escape challenge experience, and the live kitchen fire demonstration was used to show people the potential consequences of drinking alcohol and cooking or leaving cooking unattended.

'We 100 percent achieved our goal of showcasing our capabilities and raising awareness on how to prepare for an emergency. The feedback we get is always extremely positive,' Phil said. 'Look out for next year, it's going to be bigger and better!'



'It's a chance for the public to meet us and learn about how to be ready and prepared for an emergency, should it ever happen.'

# PREPARING TO RESPOND TO THE NEW CITY RAIL LINK (CRL) TUNNELS

The City Rail Link (CRL), New Zealand's largest transport infrastructure project, is scheduled to open in November 2025. The \$5.5 billion project will better connect Auckland's entire rail network.

The new twin 3.45-kilometre-long tunnels connect the Britomart (Waitematā) station with the western line at Mount Eden (Maungawhau). Some parts are up to 42 metres below the Auckland city centre.

Our National Operations Advisor, Infrastructure, Jon Harris said it is critical that we familiarise ourselves with the tunnels and the station buildings before they are operational.

'We have been working closely with City Rail Link and Auckland Transport to develop a schedule of site visits, tabletops, and operational drills.'

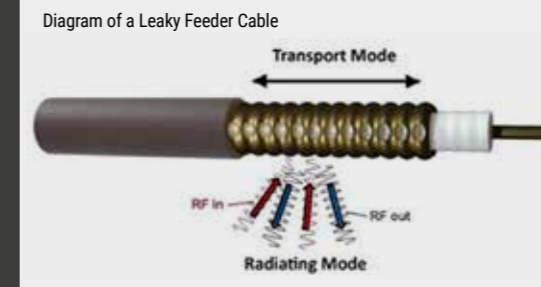
'All four watches at Auckland City Station, Parnell, and New Lynn Stations will be on the schedule. Site visits have already begun and will continue throughout construction. Most of the operational drills will be held in 2025 prior to the opening.'

Jon said having dependable and reliable radio communications while in the tunnel is essential, and Fire and Emergency is working hard with our partners to make sure we have an effective system.

'Our current radio system at the Britomart Station (Waitematā) does not meet our needs.'

Firefighters can't talk together unless they are especially close to each other, and only one person at a time can talk to the surface. We knew we would need a much more robust system.

'Tunnels and underground environments prevent radio signals from reaching as far as they normally can in open spaces. Many tunnels including the Britomart system use a leaky feeder cable to carry the signal along the tunnel. The radio repeaters are connected to these devices, and they emit and receive radio waves. Essentially, they act as an antenna along their entire length.'



'Auckland Transport has ordered new equipment, which will be delivered in the next few months. The City Rail Link (CRL) has also designed a Distributed Antenna System (DAS) including a leaky feeder cable, which will be installed into the CRL tunnels and then connected to the radio system at Britomart (Waitematā).'

Jon said with this system, everyone should be able to communicate reliably within the tunnels. In addition, radio coverage will be extended on the surface near station entrances, so command and other essential personnel can communicate with the firefighters below. This same system will be extended throughout the four stations in the CRL.

'The newly installed equipment on the leaky cable will allow us to provide three normal repeater channels for use for operations when underground. To accomplish this, there will need to be reprogramming of the portable radio channels in Auckland.'

'This radio update will significantly increase the safety of our personnel who will be advised in the next few months when the change takes place.'

Jon said the new City Rail Link will greatly increase the movability of citizens in the CBD.

'Once completed, the rail network will have a capacity of 54,000 passengers an hour. We will likely see more tunnels

in the future, such as the Auckland Light Rail (connecting Auckland City Centre with Māngere) and the Waitematā Harbour Crossing.

'To ensure firefighter safety and serve the public, we will need to become proficient in responding to emergencies in these tunnel environments.'



# MĀNAWATIA A MATARIKI!

## CELEBRATING THE APPEARANCE OF MATARIKI IN THE SKY AND THE START OF A NEW YEAR

As the earth tilted away from the sun and our winter days shortened, the star cluster of Matariki (Pleiades) became visible in the sky for the first time since winter last year. The appearance of Matariki (and, for some, the star Puanga) heralds the start of a new year and is a time for remembrance, gratitude and looking to the future.

For many iwi and hāpu, Matariki was a time when the harvests of the summer season would be stored to sustain the people through the winter and planning for a new season could begin. It was also a time to retreat to the warmth and safety of a home base.

This year Matariki was officially celebrated as a national holiday on 13 July, but celebrations surrounding that date took place up and down the motu (country).

### Matariki hunga nui, Matariki the gatherer of people

Across our organisation, Matariki and Puanga celebrations were held in fire stations and community spaces. We invited our friends, whānau and other agencies such as Police and St John to join us for a ceremony at dawn, when we were most likely to see the stars. The dawn ceremony is commonly known as 'whāngai i te hautapu' – or hautapu for short and refers to feeding the stars of Matariki with an offering of kai (food).

### There were three parts to the ceremony:

#### Te Tirohanga – The viewing

We looked for Matariki in the sky. The brightness of the different stars in the cluster, along with their movement and clarity, indicates the bounty of the impending season.

#### Te Whakamahara i ngā mate – Remembering those who have passed

We called out the names of loved ones who have passed away since the last rising of Matariki. It is the belief that by doing this their spirits become stars in the sky.

For our Wellington ceremony, members of our Executive and Regional Leadership Team read out the names of people connected to our organisation past and present.

You can see these names via this video remembering them.



#### Te Whāngai i ngā whetū – Feeding the stars

Because many of the different stars in the Matariki cluster are associated with food, and because its role is to care for those who have passed and bring forth the bounty of the year, we gave thanks to the stars by cooking kai, the steam of which rose into the sky to feed Matariki.

### Puanga

Puanga is a single whetū (star). It's not part of the Matariki cluster but appears in the evening sky shortly before Matariki rises each year. Puanga rises higher in the sky than Matariki so it's recognised by iwi and hapū who can't see Matariki from their location.

### Whaowhia te kete mātauranga, fill the basket of knowledge.

To help us connect to this significant time of year, our Kaupapa Māori and Cultural Communities Branch organised three online wānanga (discussions): "Kawhe me te Kōrero – Coffee and Conversation". Over 150 people signed up to take part in a Kawhe me te Kōrero, which covered the following kaupapa (topics):

- Introduction to Matariki
- Whāngai i te hautapu – Hautapu dawn ceremony
- Te Tāwhara Kai Atua mā Matariki: The Sacrificial Offerings for Matariki.

These wānanga were recorded and can be found on the dedicated Matariki Portal page, along with more learning resources about Matariki and Puanga.



You can access this page using this QR code or by searching 'Mānawatia a Matariki' in the Portal search bar.



# BULMER CAVERN MT OWEN • NEW ZEALAND



## DEEP CAVE SAREX

Earlier this year, some of our people from the Nelson Fire Station participated in a multi-agency cave search and rescue exercise (SAREX) in the Bulmer Cavern system at Mount Owen, southern Tasman.



The Bulmer Cavern is the longest in New Zealand at 74 kms, and the area featured in the Lord of the Rings movies.

Nelson Senior Station Officer Kevin O'Connor said the exercise involved around 100 personnel with 85 cave rescue specialists including Australian cave rescuers, LandSAR and Fire and Emergency, with Police as the lead agency. Two helicopters were used to transport personnel and a large amount of gear to the Safe Forward Point.

'The Nelson Incident Command Unit (ICU) was used to house the Incident Management Team and manage the above ground communications with the mountain sectors. All radio messages of note were transcribed into a live cloud document for other members of the IMT to review immediately.

'Three sectors were established: SAR Base Nels2118, Safe Forward Point on the mountain, and Cave Entrance, approximately 20 minutes' walk from the Safe Forward Point.'

Kevin said the scenario involved a three-person team, who were three hours into the system when a member was injured. A second

member returned to the surface to raise the alarm. The exercise started at 0800 hours on Friday morning and ran continuously for 40 hours. Initial team taskings were handed out at SAR base; new tasking and re-tasking was then carried out at the cave entrance using Starlink satellite and laptops.

'In this environment one hour travel by an able body caver can be up to 12 hours for a stretcher rescue recovery. In this event, caver rescuers were required to set up 40 rigging systems of different complexity to extract the patient. Cave rescue is a specialised discipline; not all cavers are rescuers.

**'These training events are invaluable for Fire and Emergency ICU personnel and provide a greater understanding of how Command and Control operates in a multi-agency environment.'**

# REFLECTING ON CULTURAL AWARENESS

When Te Ūpoko Region Manager Bruce Stubbs turned up to the AFAC Australian Institute of Police Management Strategic Command course in New South Wales, he realised he was the only non-Australian of the 30 participants.

The time soon came for everyone to introduce themselves and Bruce said he took the opportunity to deliver his pepeha (introduction), something that he's been building on and practising for quite some time with the support of our Kaupapa Māori and Cultural Communities Branch.

**'Doing my pepeha truly connected me with the group and built a relationship and connection from the start.'**

AFAC events start with an 'Acknowledgement to country' which is an acknowledgment of the Traditional Custodians of the land in which the event is taking place. As part of the welcome to country, Bruce offered a karakia (prayer) to both open and close the week-long course.

The significance of his actions was not lost on the other 29 participants.

Bruce noted that most if not all the course participants reflected on their own cultural awareness, understanding of their welcome/acknowledgement to country and the journey they are on, and how our country is leading the way here.

'This was not my intention, rather it was living the values we hold dear, but was an unintended positive consequence for them all.'



One of the course participants, Leigh Pilkington - Director Emergency Management at New South Wales Department of Primary Industries, said they been gathering momentum for a few years in reconciliation, part of which is delivering an acknowledgement of country at all meetings, gatherings, and events.

**'I have personally been grappling with how to make my acknowledgement sincere, genuine, and meaningful. After seeing Bruce present his pepeha and hearing him talk about how the focus isn't on the exact precision of his words but the effort being made that is appreciated, I have committed to incorporating an understanding of the Darkinyung people (indigenous people of New South Wales) into my acknowledgements, and honouring Darkinyung language and beliefs to give context to my work.'**

Leigh has since thanked Bruce for leading in this and the positive impact his actions have had on him and his leadership team. Leigh also remarked on a personal note that his kids have loved the changes he's making.

# NEW STATIONS AND UPGRADES COMPLETED

Our three-year programme of building new stations and upgrading others is finished.



Christchurch City

In July 2020, Fire and Emergency received \$51.3 million in funding for fire station rebuilds and upgrades. This injection of funding came from the Government's COVID-19 Response Recovery Fund (CRRF) for 'shovel-ready' projects.

National Property Manager Dominic Hare said CRRF was an opportunity to accelerate work under Fire and Emergency's national property capital works programme.

'The funding has been put to excellent use with 26 upgrades and rebuilds completed under the three-year programme, supporting a focus on a fit-for-purpose and consistent property network across the country.'

'The CRRF work ranged from the total replacement of several stations that had reached the end of their life or had significant seismic issues, through to partial refurbishments and improvements to obsolete facilities. The funding allowed us to deliver new and improved facilities in a range of locations earlier than we had anticipated.'

'Having fit-for-purpose facilities will help Fire and Emergency better serve local communities in times of need.'

**'The success of this programme of work is a credit to the property team and those who have supported them; they should certainly be very proud of how well they have delivered in some very challenging circumstances.'**

## The locations were:

- Napier
- Christchurch City
- Greymouth
- Athol
- Paeroa
- Pōkeno
- Kawakawa Bay
- Titahi Bay
- Seaview
- Appleby
- Featherston
- Cavalli
- Ōkaihau
- Waipawa
- Greytown
- Balclutha
- Peel Forest
- Makarora
- Taihape
- Waihi
- Huntly
- Stokes Valley
- Sumner
- Darfield
- Rangitata Gorge
- Kaikōura.



Kawakawa Bay



Greytown



Makarora



Taihape

# LAYFLAT HOSE PUT THROUGH ITS PACES



Five lots of layflat hose were recently put through their paces at our National Training Centre.

Some of our hose subject matter experts and members of the Equipment and Logistics team tested 25 mm, 38 mm, 45 mm, 70 mm and 90 mm hose. They were measured and weighed, and tested for pressure, friction loss, kinking and abrasion. The team also applied hose patches to see how well they accepted or reacted to our hose repairing standards.



Equipment and Logistics Capability Manager Rob McMahon says these trials are the first stage of the process and are done so the E&L team can look for any glaring issues and be as confident as possible about putting the hose out for proper operational trialling and evaluation before buying in any quantity.

**'We want to ensure we get the best possible equipment into the hands of our frontline firefighters at optimum cost (best value).'**

'When we select equipment, where possible the team involves operational firefighters early in the procurement and introduction into service process, because we know they will be expected to use that equipment on a day-to-day basis, and they need to be confident that their gear performs to expectations.'

'E&L evaluations and trials are part of our team's principles of "getting the right equipment in the right hands at the right place at the right time, in the right condition, with the right support at the right cost". We support Fire and Emergency's '4 Rs' with our own '7 Rs.'

Rob says hose that was trialled last October has been out for operational evaluation since then, and feedback from those using it has been coming in recently.

'The operational trialling for that hose is coming to a close and then we will make the decision whether to buy it or not.'

Subject matter experts involved in the trials included operational firefighters and representatives from the NZPFU and the UFBA.

Greg Lee, President NZPFU Central Branch, was one of the subject matter experts involved in the hose trials at NTC. Greg says these kinds of trials are absolutely vital to find the best tool to do the job effectively and safely.

'Safety especially is a big thing for us, not just with hose but with any equipment. Our members can have confidence in the fact that NZPFU SMEs have been involved and have had input into these trials, and the hose chosen will be the best of the options looked at.'

The next evaluation and trial 'set' will be conducted at Rangiora and this will evaluate new forestry hose.



Rob McMahon



# NEW MAN TYPE 3 APPLIANCE PUT TO THE TEST

A team of Fire and Emergency experts has been putting a trial MAN Type 3 appliance to the test over recent weeks.

We purchased 30 new MAN cab chassis to provide new Type 3 appliances while the next generation Type 3 appliances procurement is under way. We then commissioned the design and supply of two trial alternative design MAN Type 3 appliances on the new cab chassis – one from SEM Fire and Rescue in Australia (part of the Varley Group) and one from Angloco in the United Kingdom.

The appliance from Angloco has been under evaluation by a team of four – two subject matter experts from Fleet and Service Delivery and two operational firefighters.

Our Vehicle Development Manager, Ian Rietveld, says the appliance is assessed to make sure it meets our specifications.

'When we order an appliance, we tell the supplier what we want it to be able to do – our specifications – and once it arrives, we check that it does those things.'

'Our specifications include features that the appliance is required to have, for example locker lights, and performance standards that the appliance needs to meet, for example can it pump the specified volume of water under the specified conditions. Acceptance testing of the appliance is undertaken to ensure that the appliance has the features it's required to have, it meets the required performance standard and all aspects function properly.'

'During the acceptance testing we are also identifying whether there are any features which we may want the supplier to change, so ultimately, we are in a position to order a production run of 28 more of these appliances to be built on our remaining MAN cab chassis as soon as possible.'

Ian said the SEM trial appliance is due to be completed in August ready for Fire and Emergency testing at their factory.



## ORDERS PLACED FOR NEW AERIAL APPLIANCES

We were very pleased to announce in July that we had placed orders for five aerial appliances.

Two-Type 5 Medium appliances (single cab with 32-metre aerial) will be built in New Zealand and a Type 5 Large appliance (single cab with 45-metre aerial) and Type 6 (double cab with 32-metre aerial) will be built in Australia. Our supplier is Global Fire Solutions Pty Ltd (t/a Bronto Skylift Aus./NZ).

All five appliances will have the aerial apparatus fitted to the cab/chassis in Finland and then be shipped off to two different body builders for the locker bodies to be built. The Type 5 Large and Type 6 appliances will go to Bell Fire and Rescue in Australia and the other three, Type 5 Mediums, will go to Fraser Fire and Rescue in Wellington. We are aiming for the delivery of the first appliance to be in Q2 of 2025, with the remaining appliances following shortly after.

## KARAKIA FOR NEW TYPE 3 APPLIANCES

It was a significant milestone for the Type 3 Appliance Acquisition Project when members of our Pou Takawaenga Māori (Māori Liaison Team) performed a karakia (blessing) on our four new Type 3 appliances at Wellington City Station on 12 July.

The karakia offered the appliances safe and unencumbered travels as they head to the next phase of their journeys, which will be their evaluation locations – Auckland City, Hamilton, Napier, and Christchurch City. Over the next nine months, all four will be put through their paces.

Representatives of the suppliers of the appliances – Angloco (based in Yorkshire, England) and Emergency One (based in Ayrshire, Scotland) joined our executive leadership team, service delivery leadership team, members of the Project Working Group, Steering Committee, and Project team, and Fire and Emergency support staff at the karakia (blessing).

SSO Te Hiku/National Advisor Operations (Service Delivery) and member of the Type 3 Appliance Project Working Group, Quin Webster, said it was a great occasion.

'It was fantastic to see the culmination of a huge effort from many people, resulting in these impressive vehicles being delivered and ready for the next stage of evaluation.'

Here's to  
our local  
volunteers  
crewing  
594 stations  
across  
Aotearoa.

