

Brigade

spring 2019

cfa.vic.gov.au

SAFETY
TEAMWORK
ADAPTABLE
INTEGRITY
RESPECT



▼ Pre-season training could save your life





05

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Pre-season training could save your life

COVER PHOTO: KEITH PAKENHAM AFSM

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Chair Greg Smith AM



CFA has welcomed the appointment of two new Board members, Dawn Hartog and Kent Griffin, who join me as Chair, Michelle McLean as Deputy Chair, and Simon Weir, Gillian Sparkes, Pam White and Peter Shaw as reappointed members of the Board.

The process for the appointment of the final CFA Board member is still to be finalised at time *Brigade* magazine went to print.

Many in CFA will know Dawn through her extensive work in the emergency services sector across a number of different organisations. Dawn is an experienced manager with a demonstrated history of working in the public safety and emergency services industries, and is skilled in emergency management, emergency planning, emergency services, management and community engagement.

Kent Griffin is an experienced leader, board director and senior executive in the financial services industry. Kent has more than 30 years of international experience in financial services, including more than 10 years as a chief financial officer and an executive team member.

CFA farewells Tim Young and Lynda Hamilton after three years of significant service to our organisation. I thank both Tim and Lynda for

their dedication and commitment to deliver results for CFA during their time on the CFA Board and sub-committees.

CFA is ever changing, but our commitment to the community and to our people can always be relied upon.

The Board supports CFA's four strategic goals:

- We put the community at the centre of everything we do
- We deliver programs and services that make a positive difference
- We provide a great place to volunteer and work
- We are a progressive emergency service.

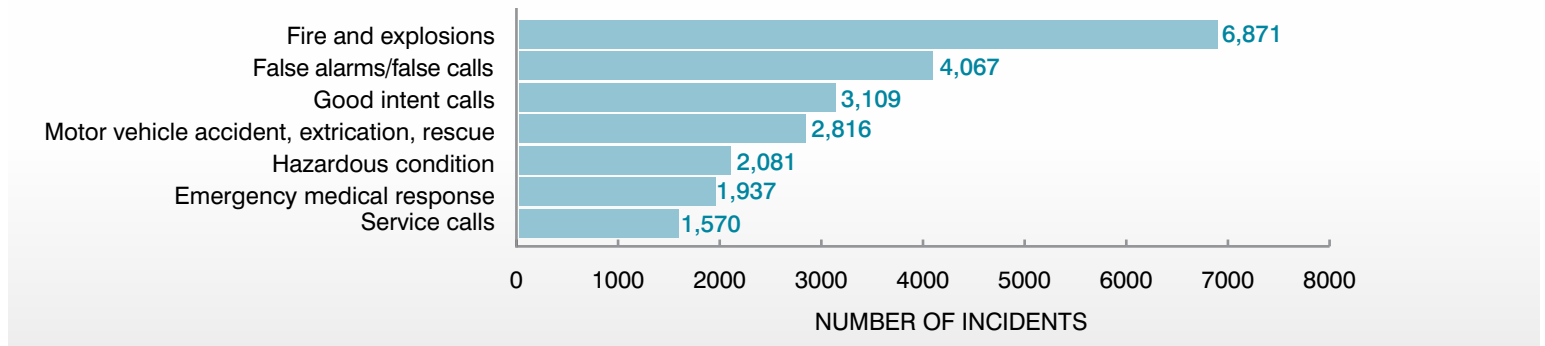
CFA is embarking on a transformative journey; a journey inspired by our evolving Victorian communities.

The reform of Victoria's fire services provides us with a unique opportunity to shape the future of CFA and build on our foundations as a community-focused organisation. As a Board we have endorsed a 10-year CFA Strategy that outlines how we will embrace change while continuing to stand side-by-side with our communities to prevent loss of lives and property.

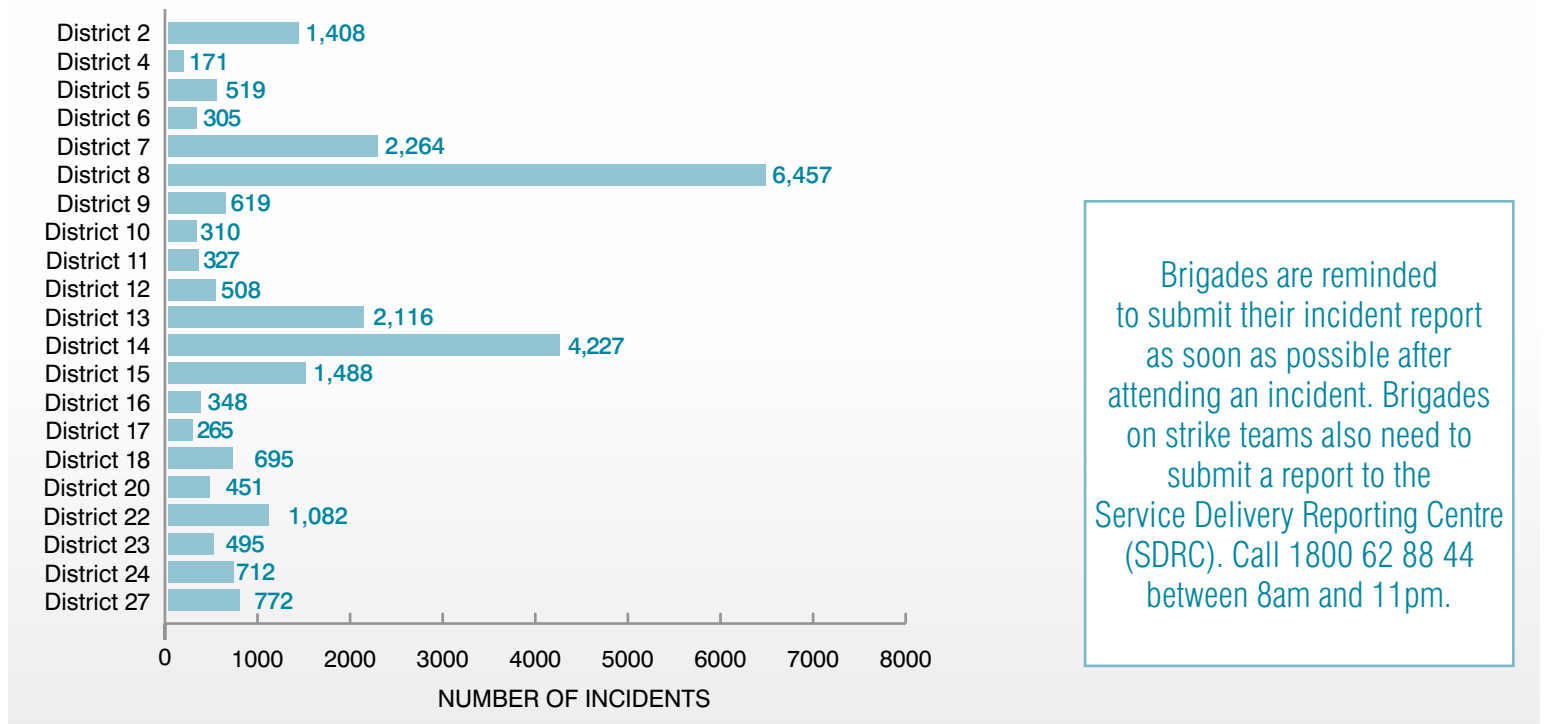
Your CFA Board will continue to represent the needs of CFA as we navigate this period of change during Fire Services Reform. We will continue to seek the best for this organisation.

Incident summary 1 Jan – 30 June 2019

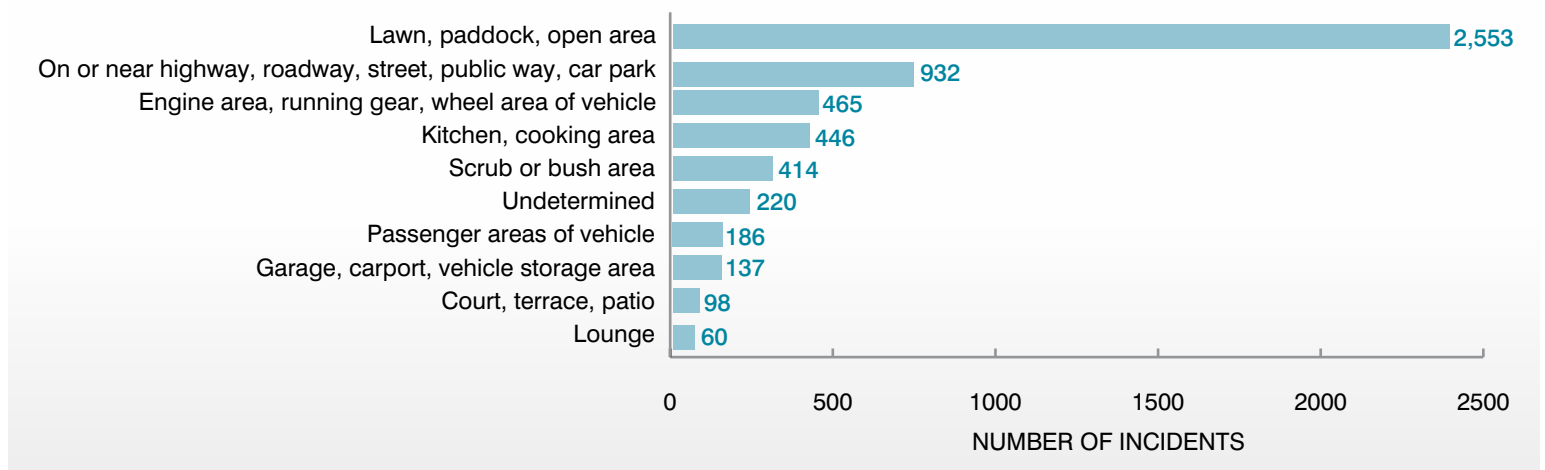
STATEWIDE INCIDENTS BY TYPE



STATEWIDE INCIDENTS BY DISTRICT



ORIGIN OF FIRE



Fireys battle Beaconsfield blaze



“When we arrived, there were some people standing in the smoke trying to fight the fire with a nearby fire hose reel.”

CFA District 8 Commander Ian Cross was among those called at about 3pm in early July to a fire that engulfed six shops on Princes Highway, Beaconsfield. The fire also impacted peak hour traffic and risked spreading to neighbouring stores.

“CFA crews were confronted with a significant amount of smoke and several shops on fire,” Ian said.

He said crews assessed the scene as soon as they hit the ground. “We checked the structural integrity of the building and while it was severely damaged the building was still intact.

“One of the shops was an antique store, and it was packed to the ceiling with antique furniture. So it was a very high fuel load with highly polished furniture, and it was really difficult to make our way through it.”

Ian said the fight was made even harder because all the shops shared a common roof space.

“There was no fire separation and that’s what allowed the fire to spread so rapidly through the shops. It took the two neighbouring restaurants out in no time at all.”

Thanks to an aggressive internal fire attack, firefighters stopped the fire half way along the Taco Bill restaurant, and saved two neighbouring businesses.

The fire drew quite a crowd, with pub customers across the road having a front row seat. A few members of the public were treated at the scene for minor smoke inhalation, and the fire was declared safe at 6.30pm.

An investigation determined the fire was sparked by either an overloaded power board or by an object falling over a heater.

STORY SIMON GALLETTA



Town rallies after supermarket razed

The findings of an investigation into a fire that razed Beulah's only town store to the ground on 23 July were inconclusive because the fire was "too ferocious".

District 18 brigades in Hopetoun, Kenmare, Roseberry and Warracknabeal were called to the blaze on the town's main street shortly after 1pm to find the IGA fully alight.

Initial attempts to battle the out-of-control fire were called off because firefighters deemed the fire too dangerous. Instead, they were forced to wait for back-up from nearby brigades.

District 18 Commander Ron Shiner said a number of explosions could be heard coming from inside the store.

"There was a fire investigator at the scene but the cause came back as 'undetermined', simply because the fire was too ferocious.

"Those buildings are very old and predominantly constructed from timber. So once the fire took hold, the heat coming out of it would've been extreme. The fire completely destroyed the store."

Yarriambiack Shire Councillor Helen Ballentine said the store was a landmark. "It was a Cust

family store," she said. "In the pioneering days, the family built a number of general stores in the area.

"Although it's a big loss for the town, Beulah is a very strong community and I'm sure they'll get back on their feet."

Initially, some essential food items were stocked by the Business Centre, and the new owner of a former café offered its use for 12 months free of charge. But realising something more substantial was needed, the Beulah Historic, Learning and Progress Association got the wheels in motion.

"We set up a pop-up food shop in the town," Association Secretary Barb Moore said. "Many Beulah residents are elderly and don't drive. The closest supermarket and cafe are in Hopetoun 25 kilometres away. We are going straight to wholesalers to buy food for the shop.

"We're really grateful for the support we've received. We were given some money by GrainCorp and Murra Warra Wind Farm, and we've received individual donations and grants.

STORY SIMON GALLETTA



PHOTO: MICHELE MEROLI

Noble Park ladder rescue

At just after 9am on 19 August, a Noble Park brigade pumper crew worked alongside Dandenong and Springvale crews to rescue a man who had fallen on a work site.

A worker fell from the roof on the building site, fracturing his leg after landing in some scaffolding. A ladder platform, usually based in Dandenong, was requested to help rescue the injured man.

Overhead electrical lines prevented the ladder platform from being set up in the street, so crews assessed access via the driveway. At first the driveway looked like it would be far too narrow for a rescue vehicle of this size but after removing a fence, the narrow jacking system of the ladder platform allowed it to fit between an apartment block and town houses.

Noble Park brigade members, newly-elected Fourth Lieutenant James Smith and new Crew Leader Firefighter Kane Floyd gained some invaluable experience working alongside more senior and experienced staff from Dandenong and Springvale.

"The electricity lines made accessibility hard, which highlighted how extremely beneficial it is to



have resources like this ladder platform," James said. "It provided quick, safe and easy removal of the man in this situation.

"This is a prime example of volunteers and staff working together, protecting our community. Crews worked professionally and quickly with one another, alongside workers onsite, to remove the fence and allow the ladder platform access to the site."

STORY DAISY CLELAND



Kelpie rescued from mineshaft



The CFA commander behind the rescue of a dog stuck down a Central Victorian mineshaft on 10 July 2019 said it “wasn’t a case of just going down there and getting him”.

After being called just after 10am, it took rescuers more than four hours to access the site and winch Boofa to safety, after he fell down the four-and-a-half-metre mineshaft on Spearys Road, Dereel.

The red kelpie had been missing for a week, and it’s not known how long he’d been trapped in the mine.

CFA Commander Stephen Alcock said local CFA volunteers from Dereel brigade were supported by technicians from Lucas Hazmat and Geelong City Rescue.

“Dereel Fire Brigade was first on the scene and confirmed there was a dog trapped down a mineshaft. They then requested assistance to rescue the trapped pooch,” Stephen said.

“When we are faced with situations like this, it takes time to assess the requirements of the rescue. We don’t know what’s been in the mineshaft before; there could be rusting metal or other biohazard substances that can emit hydrogen sulphide gas that’s dangerous to humans.

“There could be rotting carcasses that could pose a problem. There could be carbon monoxide if machines had been running nearby.

“There’s a whole gamut of risks we have to check before sending someone down a mineshaft.”

He said an atmospheric monitor was lowered down the hole and a series of tests conducted. These showed safe oxygen and atmospheric readings.

“Next we ensured the stability of the mine entrance by placing shoring boards around the area, and then set up a tripod directly over the top of the entrance, allowing one of our rescue team to be lowered directly into the mine to get to Boofa.”

A ‘nappy harness’ was wrapped around Boofa, and alongside his rescuer, the family pet was winched to safety.

Stephen said it was a smooth rescue and commended the firefighters for their incredible efforts.

“By following our processes and systems, what could have been a complex rescue transpired without incident and ended well for Boofa and his owners.”



PHOTOS: STEPHEN ALCOCK

Back at home, Boofa was soaking up much-needed cuddles with his owners.

“My husband and I searched everywhere,” Tamara Turner told Channel 9.

“We looked in every place we possibly could. And lo and behold he was only 600 metres from our back gate down this mineshaft.”

STORY SIMON GALLETTA



Sticky clean-up at truck rollover

CFA crews worked throughout the day to remove an estimated 38 tonnes of molasses from the Calder Highway following a truck rollover in mid-May 2019.

Firefighters were called just after 9.30am to a truck accident at Glenalbyn near Wedderburn, with a possible person trapped. Wedderburn Fire Brigade arrived on scene to find the truck on its side across the width of the road and its contents, three tanks of molasses, spreading rapidly.

To add to the mess, the truck's fuel tank ruptured as a result of the accident causing about 100 litres of diesel to combine with the molasses and flow into table drains on the roadside.

Victoria Police were on scene early and closed the highway in both directions. The Environment Protection Authority and VicRoads were called to the scene, and the table drains were also dammed temporarily so the spill could be contained. SES and Loddon Shire Council also helped at the incident.

After the truck was righted at about 11am, crews from Wedderburn and Korong Vale brigades began the huge task of cleaning up the spill, which continued into the following day.

Wedderburn firefighter Anne Hassell said the driver was already out of the truck when they arrived thanks to help from a passing technician, who used his ladder to help him climb down from the cabin.

"The first thing we did was make sure the truck's battery was disconnected, then we got a charged hose line ready," Anne said. "Even though diesel doesn't have much flammability the truck had already sparked as it slid along the road on its side.

"The force of the crash had also thrown molasses 50 feet into the air, including into trees. Under direction from EPA we blocked the table drains at both sides to contain the spill to a small area.

"Molasses is quite destructive in that it can suck all the oxygen out of water, depriving vital plant and animal life of important nutrients."

It took five tankers of water to make a dent in the spill, with VicRoads using hot water pressure washers the next day to remove the remains.

An environmentally-safe suction truck was also used to remove the molasses from the grassy roadside.

"It was a really sticky mess," Anne said. We had to walk back and forth through the table drains to be able to work on both sides of the accident because the truck was blocking the entire road.

"The worst part was trying to get the molasses off our boots!"

The truck driver was taken to hospital after being assessed by paramedics.

STORY SHAUNNAGH O'LOUGHLIN



CEO/CHIEF OFFICER



Steve Warrington

At CFA we put safety first. CFA members, staff and volunteers have worked tirelessly to ensure safety is a priority for everyone, on and off the fireground, and they are to be congratulated for their efforts.

However, we must never be complacent. Every day our firefighters respond to incidents that put them in potential harm as we undertake our mission to protect lives and property.

The seasonal outlook for much of the state forecasts there will be normal fire potential, however, environmental factors vary in regions and can still lead to dangerous and unpredictable fires. Parts of our state have had lower-than-average rainfall, which tells us we need to be prepared for the fire season to start at any time.

Safety preparation for our members starts with training. It's understanding what the risks are and how to recognise them; it's practising drills and talking about the risks with our crews and teams, prior to getting a call.

Wildfire Minimum Skills, Tree Hazard Awareness and practising a turnover or entrapment drill are all compulsory activities for every CFA member. These need to have been completed prior to setting foot on a fireground. It's so important that we eradicate as many risks as we can through proper training. By completing these three pieces of training, you're helping yourself to be as prepared as possible.

Our focus on safety extends to the mental health and wellbeing of all CFA members and the people around them.

While we constantly highlight the importance of physical wellbeing, including fatigue and hydration management, our mental wellbeing is just as important. When we take breaks from physical work, it's also important that we take mental breaks to reset – and ensure we're not exhausting ourselves.

Please keep an eye on those around you. Whether it's your family or other CFA people, it's imperative you're aware of signs that someone is in physical or mental strife. We've invested in our people's wellbeing through the Wellbeing Support Line, which is accessible 24 hours a day, seven days a week – and I encourage people to call, even if it's just for a conversation.

Finally, when we interact with our communities we need to be aware of the many ways CFA interacts with children and young people. CFA has made a commitment to being a child safe organisation. Everyone must be able to recognise child safety issues and be aware of how to report them. The children in our organisation and in our communities have a right to be heard and protected, and all CFA people have a responsibility to report concerns.

Safety is one of our values and remains a priority: look after yourselves, your crews and families, and be as prepared as you can for this coming fire season.

EXECUTIVE DIRECTOR TRAINING



Gregg Paterson

Our training portfolio team was extremely busy last financial year; the statistics for the training activities across CFA were astounding. It's especially pleasing to see our members accessing online learning activities as our Learning Hub further matures.

This is a snapshot of training activity 2018-19:

- 3,006 classroom courses attended by 27,099 people
- 5,399 drills attended by 35,523 people
- 7,768 people accessed online training
- 382 briefings attended by 4,639 people.

In August 2019 I was pleased to table our Training Strategic Plan 2019-24. The plan outlines our commitment to build our organisational capability and capacity to ensure we provide a supportive and empowering learning and development environment. We'll be investing in training programs, products and infrastructure that reflect our commitment to our diversity and inclusiveness, to ensure our programs can be easily accessed by all CFA members. In turn, this will transform CFA training into a modern, resilient, sustainable and innovative service delivery unit.

During 2019-24 we will also invest in innovation and training programs to ensure volunteers and staff have the necessary skills, attributes and experience to carry out their roles safely, and lead our organisation into the future. Our journey of cultural and continuous improvement will ensure our training programs, tools and materials are relevant, modern, easily accessible and can be delivered in a range of ways including traditional face-to-face, blended learning, eLearning, virtual reality and simulation.

A key focus of the plan is to build volunteer trainer and assessor capability and capacity.

On another important issue the training team is excited to offer members who train and assess others the opportunity to update their credentials to meet revised national standards. Not only does this meet safety and registered training organisation compliance, but the training and assessment qualifications are highly regarded in a number of industries, giving members transferable skills.

Information about trainer and assessor requirements and scheduled training is available in the Learning Hub section of CFA's intranet. You can also contact your local district coordinator for learning and development or email training@cfa.vic.gov.

"Completing the TAE upgrades has been a challenge," said Heather Scale, a fourth lieutenant at Plenty Fire Brigade, a volunteer trainer and assessor, and driver educator.

"But the facilitators made the process as smooth as they could. The group I did the upgrade with were willing to share ideas and experiences, and we supported each other. The camaraderie among the students was really beneficial, and it was a worthwhile journey."

ACTING ASSISTANT CHIEF OFFICER West Region



Brett Boatman

It is 0200 hours, the middle of winter and your brigade is paged to a reported B-double versus a tourist coach on a remote part of the major highway that connects Melbourne and Adelaide. The local emergency services sector is beginning to mobilise. In fire trucks, ambulances, police cars and SES rescue vehicles, emergency services people are visualising the worst and hoping for the best.

This was the scenario that faced brigades responding on the stretch of Western Highway between Horsham and Dimboola.

A visit to any CFA brigade, volunteer or career, inevitably involves the sharing of stories about major fires, incidents, accidents or emergencies CFA has attended. In my experience these conversations extend to imagining the 'what if' scenario. I've heard discussions many times about what if the major accident had happened in our community. It is this focus on risk and consequences that allows CFA to plan and respond confidently.

At a regional and district level, the continuous planning, preparing, exercising and responding that occurs year-round focuses on the spectrum of emergency events we can expect to encounter. The centre piece of this planning is interoperability of capabilities – each agency knowing their role and how it joins together for the best community outcome.

The successful response of Victoria Police, Ambulance Victoria, CFA, SES, Horsham Rural City and the Wimmera Health Care Group to the emergency on the Western Highway didn't happen by chance. The Incident Emergency Management Team comprised senior emergency leaders who had formed relationships through their engagement in the planning and preparing phase for emergencies. A small regional hospital could cater for an influx of more than 40 patients because of a known and understood plan.

District 17 Operations Manager Craig Brittain attended the incident and reported that the removal of 44 passengers from the coach was completed smoothly, quickly and compassionately. The interoperability between the agencies was coordinated and, given the circumstances, calm.

A member of the Dimboola Ambulance branch sent Craig a note that said, "I just wanted to pass on just how impressed I was with the CFA members (and SES too) at the bus crash last night. It was a big scene with many people involved and it didn't go unnoticed just how caring and professional all of you were. Quite a few of the people we transported said the same, including the two patients we took to the airport. They were very grateful for the help you gave".

Although this incident had a tragic outcome, with the death of the coach driver, it's worth recognising and reflecting on our successes that were the result of emergency services putting the community at the centre of their work and delivering services that make a positive difference.

OPERATIONS MANAGER District 4



John Leben

District 4 comprises 41 CFA brigades, seven forest industry brigades and a coast guard brigade. The district has three main risk environments: agricultural activity (pastoral); logging of blue gum and pine trees; and native forests. Due to our location in the south-west corner of the state we also get great support from South Australia's forestry industry brigades, Metropolitan Fire Service and Country Fire Service.

I arrived in District 4 eight months ago and I'm surprised how quickly the time has gone and that we're already preparing for the 2019-20 fire season. The amount of support I have received from members across the district and region has made the transition from the north-east to the south-west painless and very instructive.

Each district in the state has its own seasonal risks and localised risk factors and needs to develop particular response arrangements to keep their communities safe. Without guidance from district group officers and operational staff, my understanding of the district would be superficial. There is still much to learn.

During my tour of different group areas, group officers explained the risks, fire history and group capability. This detailed briefing showed the deep understanding they have of their area and the commitment to the safety of their communities.

I have been impressed with the way brigades and groups have responded to incidents and adjusted to the risks and local conditions. For example, when a fire occurred in the foreshore near Portland where the risk from the fire was low, the priority and response focused on the cultural heritage located in the fire area. This ensured that important cultural heritage sites were protected with no reduction in protection of the community. It also showed the close working relationship our brigades have with their DELWP counterparts who provided plant and heritage advice.

Congratulations to Dartmoor Group for organising the Fire Equipment Expo to ensure good cooperation and understanding with South Australia emergency services and forest industry brigades.

A major focus of the district, and in particular the Health and Safety Committee, is the effect of traumatic events on low activity brigades. There has been an increase in vehicle accidents across the district, and this has impacted brigades that don't have much experience in these types of incidents. The committee is keen to see what it can do to help. Of particular note is the work that Group Officer Wayne Munro has led to develop guidelines for brigades to undertake an after action review following a traumatic event such as a vehicle accident.

The district's focus now switches to preparation for the upcoming fire season. With the dedication and proactive nature of the district, the safety of our firefighters and the community is paramount.

New volunteer structural helmet



The Pacific F15 Premium jet-style structural helmet has been announced as the new helmet for eligible volunteer firefighters with both breathing apparatus and search and rescue competencies.

The helmet, unveiled in August, was selected after an open-market, competitive tender process.

Pac Fire Australia is the successful tenderer for the supply of the Pacific F15 Premium. CFA has a longstanding relationship with Pac Fire, as it is the current supplier of our volunteer wildfire and structural helmets.

The international tender process for the supply of about 5000 helmets began in early 2019, and was followed by an extensive evaluation process. The submissions were shortlisted to four helmets which were then evaluated in live field trials with volunteers at VEMTC West Sale, Peshurst and Bangholme campuses.

The trials included hot fire drills, cross-sectioned with search and rescue components where participants trialed the helmets while responding to structure fire and vehicle accident scenarios. The trials took into consideration each helmet's design, useability and comfort.

CFA also consulted with VFBV throughout the project.

CEO/Chief Officer Steve Warrington said he believed the tender process, including the volunteer trials, helped decide on a helmet that's modern, innovative and effective.

"This helmet has specific benefits for internal structure firefighting attack and we're excited to be able to provide it to eligible volunteer firefighters who are trained in using breathing apparatus and

New helmet features

- DuPont Kevlar and fibreglass reinforced composite shell
- Advanced polymer chassis
- Unique crumple zone
- One-touch visor/eye protector
- Full coverage internal face shield
- Integrated helmet torch
- Comfort harness
- Comfort liner
- Flame resistant multi-layer neck flaps

performing search and rescue functions," Steve said. "I want to thank all the volunteers who put their name forward to participate in our evaluation process and those who helped assess the helmets in our live field trials. Your feedback was vital to help CFA choose the right helmet for our people."

Steve said all existing helmets used by CFA volunteers are still fit for purpose and comply with relevant Australian Standards.

The new helmets are planned to be distributed by the end of 2019.

The structural helmets project was funded as part of the State Government's \$60 million investment in the Victorian Fire Services as part of the 2017 Fire Services Statement.

More information can be found at cfa.vic.gov.au/helmets.

STORY SHAUNNAGH O'LOUGHLIN AND LISELOTTE GEARY

Forum discusses brigade support

The 2019 Enhancing Volunteerism Forum, which took place at Creswick over two days in May, provided staff with the tools and services they need to best support volunteers. It was attended by more than 120 staff from across the state, including executives and senior leaders, operations managers, commanders, BASOs and RBASOs.

This year's theme focused on brigade recruitment, retention and re-engagement because these encapsulate many of the key challenges facing brigades.

The first day began with a welcome from Executive Director Strategy, Planning and Risk John Haynes, followed by a session about recruitment, retention and re-engagement from Saskia Van Bever. Saskia's session highlighted the purpose of the conference – knowing when to recruit, how to retain volunteers and best practice when re-engaging volunteers.

Keynote speaker David Kwasha discussed how different generations approach change, how they interact with others and their views about working and volunteering.

Commander Andrew Barry and longstanding volunteer Steven Lewis (pictured right) explained their successful approach to re-engagement and succession planning in the Dundas Group, and the positive outcomes. Steven highlighted the importance of communication and took attendees through the process taken by the group to set it up for future success.

The second morning kicked off with an executive panel Q&A session (pictured below), followed by keynote speaker Clementine Ford, and wrapped up with an engaging session from Cassie Roylance on child protection and what it means for brigades.

Overall, attendees found the forum valuable and worthwhile.

"It's always good when the BASOs across the state can get together and share ideas. Speaking directly with HQ staff also helps build rapport and makes it so much easier when contacting HQ to follow up issues and find information," RBASO Jay Gardiner said.

Thanks to BankVic for supporting this forum.

STORY RHIANNON RAK



PHOTOS: BLAIR DELLEMIN



Reducing our vehicles' fuel use

CFA vehicles travel about 35 million kilometres a year, consuming around four million litres of fuel. This releases more than 10,000 tonnes of greenhouse gas a year. To reduce these emissions and at the same time reduce costs, CFA fleet managers are introducing hybrid electric and full-electric vehicles into the corporate fleet.

"With the price difference falling and a fuel saving of about 50 per cent, it makes sense to bring more hybrid vehicles into the passenger car fleet," Executive Manager Fleet & Protective Equipment Danny Jones said.

Pool vehicle users will have noticed an increasing number of hybrid Toyota Camrys appearing over the past 12 months – 35 per cent of the East Burwood HQ pool cars are now hybrids, and more will be arriving in the regional vehicle pools.

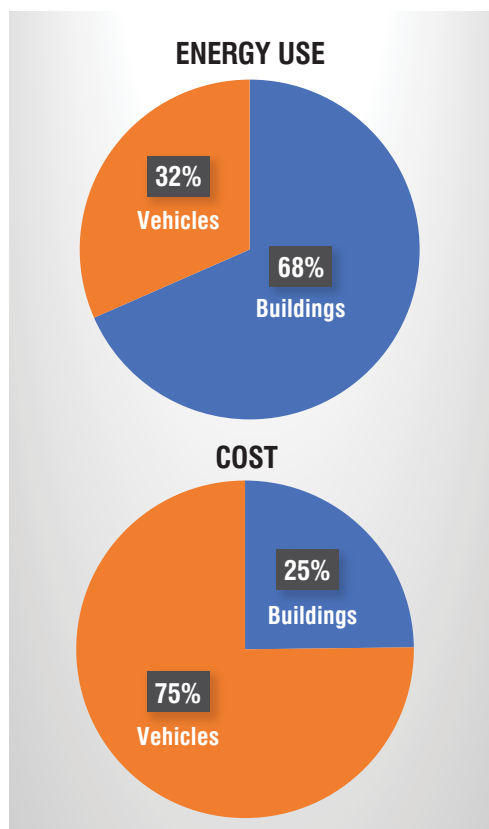
There are also full-electric and hybrid cars in the executive fleet.

This steady transition to renewable energy sources for our increasing mobility demands will mean our greenhouse gas emissions and fuel costs reduce over time. Increased use of on-site solar electricity at CFA sites, which can be used to recharge electric vehicles, will further reduce energy demands, emissions and costs

Feedback from drivers has found that hybrids are easy to drive and manage, and a trip to more distant brigades is easily managed on one or two tanks of petrol given the fuel consumption is around half the usual 10 or so litres per 100 kilometres. However, some users were occasionally unsure when the engine is running because the battery mode is silent.

ENERGY USE IN CFA

CFA consumes about 21 million kWh of energy each year at a total cost of more than \$13 million – mainly as electricity in buildings and as fuel for vehicles. The pie charts below show that although our vehicles account for only one-third of energy use, that equates to three-quarters of the total energy cost.



Under the Renewable Energy (Jobs and Investment) Act 2017, the Victorian Government is committed to increasing the proportion of renewable energy generated in Victoria to 25 per cent by 2020 and 40 per cent by 2025.

The Final Report of the Interim Targets Independent Expert Panel was tabled in Parliament on 6 June 2019 to provide advice to government about the interim targets for 2025 and 2030. It noted that emissions are projected to be reduced by 18 per cent from 2016 to 2020, with targets of 32-39 per cent reductions by 2025, and 45-60 reductions by 2030.

The proposed emissions reduction targets will be achieved by:

- increasing energy efficiency – using less energy to achieve the same outputs
- electrifying the economy and switching to clean fuels, ultimately transitioning to hydrogen-powered vehicles
- moving to clean energy, solar and wind
- increasing carbon storage in trees.

Compliance with the emission reduction, renewable energy and climate change targets means CFA needs to establish an emissions reduction program and transition to renewable energy.

VEHICLE TECHNOLOGY AND SAVINGS

The development of hybrid, electric and hydrogen powered vehicles is moving ahead rapidly.

Hybrid and electric cars are here now. Recharging stations will be needed as CFA transitions from hybrid to fully-electric vehicles.

Electric buses, trucks and fire trucks are here now. A prototype electric fire truck has been developed in the US and is being tested. Hydrogen cars and trucks are also being tested on Victorian roads. When the hydrogen is manufactured using solar energy, the only emissions from using a hydrogen-powered vehicle is a trickle of water.

Hydrogen-powered vehicles are operating in Australia, and a Melbourne council is currently converting part of its rubbish collection truck fleet to hydrogen fuel. It will use locally-generated solar energy to produce the hydrogen to power the trucks.

The slightly higher cost of replacing CFA corporate vehicles with hybrids is being met through the accumulating savings in reduced fuel costs, providing immediate positive financial returns.



Left: CFA HQ is replacing pool cars with hybrids such as the Toyota Camry hybrid

Far right: A CFA executive drives a Mitsubishi Outlander plug-in hybrid electric car

PHOTOS: KEITH PAKENHAM AFSM



Converting half the corporate fleet to hybrid vehicles is expected to reduce greenhouse gas emissions by about 15 per cent and reduce fuel costs by around 20 per cent – a payback period of just over two years. If recharging stations draw energy generated by and stored in CFA solar systems, the cost to run electric cars would be close to zero. Solar systems with battery storage could, as a by-product, provide greater resilience and business continuity for CFA operations.

RENEWABLE ENERGY AT CFA

Our priorities are to analyse and reduce energy use, and consider renewable energy sources and opportunities for offsets. These include:

- energy audits to identify energy use patterns and opportunities for efficiencies
- progressively moving to more fuel-efficient, less polluting options, starting with hybrid vehicles, then moving to fully-electric cars
- consider upgrading to a new, efficient fridge
- increasing efficiencies in our buildings: heating/cooling, insulation, use of timers, shade north facing windows in summer, seal gaps, choose 7-star efficient heater/aircon units
- installing timers on hot water services and consider solar hot water or a heat pump
- using LED lights throughout with motion switches
- looking for renewable energy sources including solar generation and storage for onsite use
- looking for carbon/greenhouse gas offsets through agroforestry and green energy initiatives.

CFA is developing a renewable energy program to reduce overall energy demand through energy efficiency measures, replacing energy supply with renewable energy sources, and progressively transitioning to renewable energy in accordance with Victorian Government policy targets.

Some CFA locations have installed solar electricity generating systems in the past six

years resulting in significant reductions in energy demand and cost. See page 63 to find out about Yackandandah and Bacchus Marsh brigades.

NEXT STEPS

CFA could transition to 100 per cent renewable energy use within three to five years given progressive action on both vehicle and building energy sources. But in the meantime, CFA will continue to monitor vehicle and building energy consumption patterns, and identify further opportunities to reduce greenhouse gas emissions and create carbon offsets.

We will fully cost the installation and ongoing maintenance of solar systems, including payback periods and return on investment calculations. We will also continue to identify grant sources for solar energy and help brigades with funding applications.

STORY MICHAEL BOURNE



CFA discovers Aboriginal heritage site after fire

During the recovery phase of the Ruffy bushfire in February 2019, CFA Vegetation Management Support Officer Mitch Emmett spotted evidence of a previously-unknown Aboriginal cultural heritage site. The signs that Mitch recognised were granite boulders strewn around the paddocks and in the creek.

The Ruffy bushfire burned through private land divided by a creek which is fed by a permanent spring. Mitch's job was to supervise contractors to repair farm fencing and stabilise soil that was disturbed when control lines were constructed.

Mitch contacted CFA's Cultural Heritage Adviser Mick Sherwen (pictured) and the pair investigated the site more thoroughly. Within a few minutes of arriving, they found the first of more than 70 grinding grooves in the granite rocks (pictured) where tools has been made, and a series of wells carved to capture different flows in the creek. They also found quartz stone flakes from tool making.

"I contacted the Traditional Owners and initiated formal site registration and survey work," said Mick. "The Taungurung elders were very moved by the discovery and thrilled to have CFA's support, and adjoining landowners said they

were proud to have such a special place in their backyards."

Mick is CFA's first Cultural Heritage Adviser. His role involves heritage management protection measures, planned burning activities (including cultural burning), developing policy and engaging with CFA members about heritage issues. He's been a volunteer with several CFA brigades and has previously worked for DELWP as a heritage specialist.

Rehabilitation work by CFA and ongoing management of the Ruffy site by the Catchment Management Authority will ensure the site is protected.

"Anyone with just a little awareness and sharp eye can make a contribution to the protection of our shared cultural heritage," said Mick. "The past, present and future is a continuum of our societies living in our environment, whether built, remote, regional, city or country. Without protection for all our heritage our identity as Victorians will be lost."

To watch a video of this site go to news.cfa.vic.gov.au/-/naidoc-week-cultural-heritage-at-cfa?redirect=%2Fcfa-categories%2Fenvironment

STORY OWEN GOODING



2019 smoke alarm campaign

In August The Hon Lisa Neville, Minister for Emergency Services, Police and Water launched the new 2019 Smoke Alarm campaign in conjunction with CFA and MFB.

The campaign was designed to elicit an emotional response through silence. Silence can send a powerful message, and for Victorians a silent smoke alarm can be deadly.

Three short videos were created for social media. Each one features a different scenario of people sleeping including a young child, an older couple and a young couple. The room fills with smoke, with the sound of fire burning in the background. The video then cuts to the key messages followed by a call to action to visit CFA's or MFB's website for the latest information about smoke alarms.

The campaign was influenced by the Australasian Fire and Emergency Service Authorities Council (AFAC) which has recommended that the number, location and interconnection of working smoke alarms are more important than the type of technology to achieve positive outcomes. The first year of the new campaign builds on the importance of working smoke alarms by aligning itself to AFAC messaging around the importance of having smoke alarms in all bedrooms and living areas.

The campaign will evolve over time and will be updated to reflect other recommendations, such as having interconnected alarms.

The advertising ran in social media, metropolitan and regional radio, Australian Traffic Network and targeted out-of-home advertising in key areas of Geelong.



A series of collateral and resources including postcards, posters (one of which is shown above) and social media tiles were produced as part of campaign material and are available to CFA members on the Template Toolkit on our intranet (members.cfa.vic.gov.au).

To find out more about the campaign or the resources available contact cfapromotions@cfa.vic.gov.au.

STORY NANCY THOMPSON

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*Membership is open to citizens or permanent residents of Australia who are current or retired employees and current volunteers of a fire and/or emergency service or family members of members of the Bank. 1. Important Information: Please note – Before you decide on any of our products or services, we strongly recommend that you read both the Conditions of use Accounts and access and Fees and charges booklets. You can find these online at our website or ask at any of our offices. We have not considered your objectives, financial situation or needs. For further information call 1800 800 225 or go to our website. Firefighters Mutual Bank is a division of Teachers Mutual Bank Limited ABN 30 087 650 459 AFSL/Australian Credit Licence 238981 | 01519-BRA-FMB-0819-Brigade-HPH





FIRESTORM

It was an image that punctuated an already horrific fire season. As campaign-level fires raged across the state, the Licola bushfire, east of Melbourne, burned with such ferocity that it was visible on the Bureau of Meteorology's (BOM) radar.

The subsequent thundercloud that formed from the smoke and flames caused more than 1,200 lightning strikes, sparking further fires and creating unpredictable conditions for frontline firefighters, aircraft and emergency management teams.

This is what happens when a bushfire creates its own weather.

Often, before a bushfire creates its own weather, it becomes plume-dominated – where the energy in a rising convection column is more powerful than the wind near ground level driving the fire. It doesn't take much for this to occur; it doesn't even require a big fire. Hilly terrain, lots of dry fuel, fire size, heat and instability in the air all contribute to creating a plume-dominant fire.

If conditions are right, the intense heat of the fire coupled with rising air generates pyrocumulus

cloud in the upper portions of the convection column, recognisable by its crisp, white, fluffy, cotton-wool-like appearance. Sometimes pyrocumulus cloud will become large enough to generate lightning. When that happens, it's called pyrocumulonimbus – a thunderstorm created by a bushfire.

A STORM CREATED BY FIRE IS UNPREDICTABLE

Several things can happen when fires become plume dominated. Updrafts and wind flow within the plume, coupled with the extra heat from the convection column will cause the wind to rise faster, drawing in more air at ground level and increasing the fire intensity. This then releases even more convective energy.

If a plume-dominated fire evolves to create its own storm activity, it becomes self-sustaining unless forces outside the plume change. Lightning can start new fires kilometres ahead of the main fire front. Spot fires are also likely to break out as embers are swept up in the swirling winds. There is potential for rain to form within pyrocumulonimbus clouds,



Left and below left: Bunyip State Park fire, March 2019
PHOTOS: KEITH PAKENHAM AFSM AND PAUL SCHOFFELMEER

Right: The Bunyip fire created pyrocumulonimbus cloud



producing downbursts and wind strong enough to change fire behaviour.

“At its biggest, the plume on the Licola fire would have reached 12 kilometres into the atmosphere,” CFA Fire Behaviour Analyst Musa Kilinc said. “As we saw, this led to dangerous fire behaviour, particularly when lightning was generated from within the structure.

“Bunyip was different in that the plume was going up and down all day depending on the weather conditions and the rate of heat release from the fire. At its peak it reached 10 to 12 kilometres into the atmosphere, and didn’t really dissipate until the evening when conditions moderated.”

RISKS OF FIGHTING A PLUME-DOMINATED FIRE

“The unpredictability of plume-dominant fires makes them dangerous for firefighters to control by conventional means,” Musa explained.

“As a result, these fires are generally uncontrollable by ground or aerial resources. Suppression actions and options at the head of the fire tend to be severely restricted until there’s a major decline in the fuel, weather, or topographic conditions.”

Musa said it is often hard to see the smoke plume when working close to the fire edge.

“Entrapment becomes a huge issue for firefighters if conditions suddenly change. Lookouts should monitor and report on weather conditions, any signs of outflow winds from the pyrocumululus or nearby thunderstorms, any spot

fires, and any changes in the smoke column, and warn crews of risks.

“To ensure firefighter safety we use LACES: lookouts, awareness, communication, escape route and safety zone.”

Plume-dominated fires and the formation of pyrocumulonimbus clouds are difficult to predict.

“With climate change, the potential for more frequent plume-dominant fire behaviour is very real,” Musa said.

“The flammability of our vegetation, climate change, our weather patterns and the nature of our topography also means we’re prone to fires like this in Victoria.

“Researchers in fire agencies, the Bureau of Meteorology, CSIRO and universities around the world are working together to better understand the complex variables that lead to plume-dominated fires and the formation of pyrocumulonimbus clouds.

“Ultimately this research is about ensuring the safety of our firefighters and emergency services personnel, and the communities they protect.

“It’s a big challenge because while we can foresee the weather to some extent, where and when a fire will break out, and whether or not we will get on top of the fire is not something we can easily control.”

For more information on plume-dominated fires see page 48.

STORY SHAUNNAGH O’LOUGHLIN

Spot fires

A pioneering Bushfire and Natural Hazards CRC project highlights the role pyroconvective interactions and spot fire dynamics play in the spread of bushfires.

Interactions between individual spot fires and other parts of the main fire perimeter can increase local rates of spread in unexpected directions. This has the potential to produce broad, flaming zones that can entrap firefighters and increase the likelihood of extreme bushfires.

This research gives fire managers and fire behaviour analysts the ability to model landscape-scale fire spread, incorporating dynamic fire behaviours, using a faster than real-time simulator. It’s more cost-effective and fills the knowledge gap; current simulators neglect the potential influence of dynamic interactions. The inability of these current models to accurately predict fire behaviour can place firefighters at risk and hinder effective public warnings.

By accounting for pyroconvective interactions between different fires or different parts of a fireline, this research improves the estimation of the overall power of a fire. When combined with research into the atmosphere’s role, it can alert forecasters to the likelihood of a fire transitioning into a more extreme event, such as a pyrocumulonimbus storm.

It’s hoped that this research will lead to better firefighter training materials, as well as equip fire behaviour analysts with tools to better assess the likely progression of bushfires and their potential for escalation.

For a more detailed explanation go to bnhrcr.com.au/hazardnotes/61

STORY AMY MULDER

An experimental separated v-shaped fire conducted in the CSIRO Pyrotron

PHOTO: ANDREW SULLIVAN, CSIRO



Aviation solution sets new direction for mapping

Victoria's aerial firefighting fleet plays a huge role in protecting communities. The fleet is crucial in both reducing the spread of fire and supporting ground crews to ensure they have all the information they need.

Previously, staff used various methods of data collection to relay information from the air to the ground, and incoming information was lost and not getting to key decision makers during incidents. There was no consistency in what was being received, what format the data was relayed in, and the accessibility of the information.

Although there's still a need to carry paper map books in the aircraft, a new solution was needed that allowed emergency services to move towards electronic mapping and instant information transfer. The solution had to be reliable, simple to use, adaptive, unified and able to withstand the rigours of the role.

At times, the devices would be exposed to harsh environments and hard usage – so when providing a solution, factors including device durability, sunlight readability, operational temperatures and power requirements were considered.

Last fire season, CFA and DELWP delivered a joint initiative to deliver a digital mapping and photo system linked with agency mapping systems. The two agencies put 36 Panasonic (FZ-A2) ToughPad tablets running a mapping and photo application called FireMapper Enterprise, into almost all agency observation aircraft.

"This application and the use of the tablets has been a great step forward for information transfer to the incident ground and control centres," CFA Commander Aviation Luke Patterson said.

"FireMapper Enterprise allows aircrews to create a digital map, share these to agency web-based mapping systems instantly and/or via email or mobile phone message to the fireground."

Aircrews will still use radio fireground channels to transfer key information to the ground, but now there's an enhanced option that allows ground crews with mobile service to receive real-time information such as:

- fire map boundary and points of interest (for example, spot fire and photos) to a mobile phone or email address
- mapping and photos in EMCOP map in a field operational vehicle or mobile communications vehicle or to a command/control facility.

To ensure a high level of service delivery, the aviation tablet solution uses an Enterprise Mobile Management (EMM) for support and administration. The EMM provides a suite of tools to enable CFA members to lock down and manage all aspects of the tablet, and provides a consistent user experience.

"Almost 2,000 photos were shared along with 500 observations last fire season, which will only grow as more people on the ground become aware of the capability," Luke said.

"The aviation tablets aren't just a case of purchasing and using a device. It's about being able to understand the requirements, and drawing on vast knowledge, experience and skill sets from numerous contributors to establish a solution for aerial service delivery."



Brigades get connected

More than 1,000 brigades across Victoria will receive internet connectivity as part of the rollout of the Connected Brigades initiative.

The initiative aims to provide a secure and standard CFA-funded internet service for brigades to support online training and improve the ability for members to communicate with each other – across regions, districts and with headquarters.

The first phase of the project was for CFA to take financial responsibility for all brigade-funded Telstra internet services. The second phase is to roll out a standard and secure internet service to all brigades.

Since it began in June more than 300

additional brigades have been connected to the new service.

This rollout could not be achieved without the cooperation of volunteers providing brigade access to Telstra and NBN technicians at installation appointments.

All brigades were invited to be part of the program with some choosing to opt out due to not requiring the service. Telstra is managing the rollout, and is working with individual brigades to arrange installation.

CFA's ICT Executive Manager Steve McCormack said the rollout was expected to take around a year to complete, with brigades receiving the best solution available for their station location – NBN wired, NBN wireless, ADSL or mobile connectivity.

“Our people are required to participate in online training, video conferencing, and community based activities.” Steve said. “To do this effectively they need to have a reliable internet connection – this project achieves that.”

Connected Brigades is one of 14 projects funded under the State Government's 2017 Fire Services Statement with the aim of ensuring CFA brigades are equipped with contemporary, high-standard equipment, tools and systems.

For more information about the project visit members.cfa.vic.gov.au/mycfa/Show?pagelid=ConnectedBrigades

STORY SHAUNNAGH O'LOUGHLIN

BUSHFIRE OUTLOOK: Gippsland most at risk

The 2019-20 fire season has the potential to be an active season across Victoria, following on from a very warm and dry start to the year.

The Australian Seasonal Bushfire Outlook: August 2019 was released by the Bushfire and Natural Hazards CRC at the AFAC19 conference in Melbourne on 28 August. The Outlook shows that the potential for above normal bushfire activity continues across the coastal and foothill forests of East Gippsland, extending into West Gippsland and the Great Dividing Range. These areas are now experiencing their third consecutive year of significant rainfall deficit, with severe levels of underlying dryness persisting in soils and heavy forest fuels, along with higher abundance of dead fuel components and higher flammability of live vegetation.

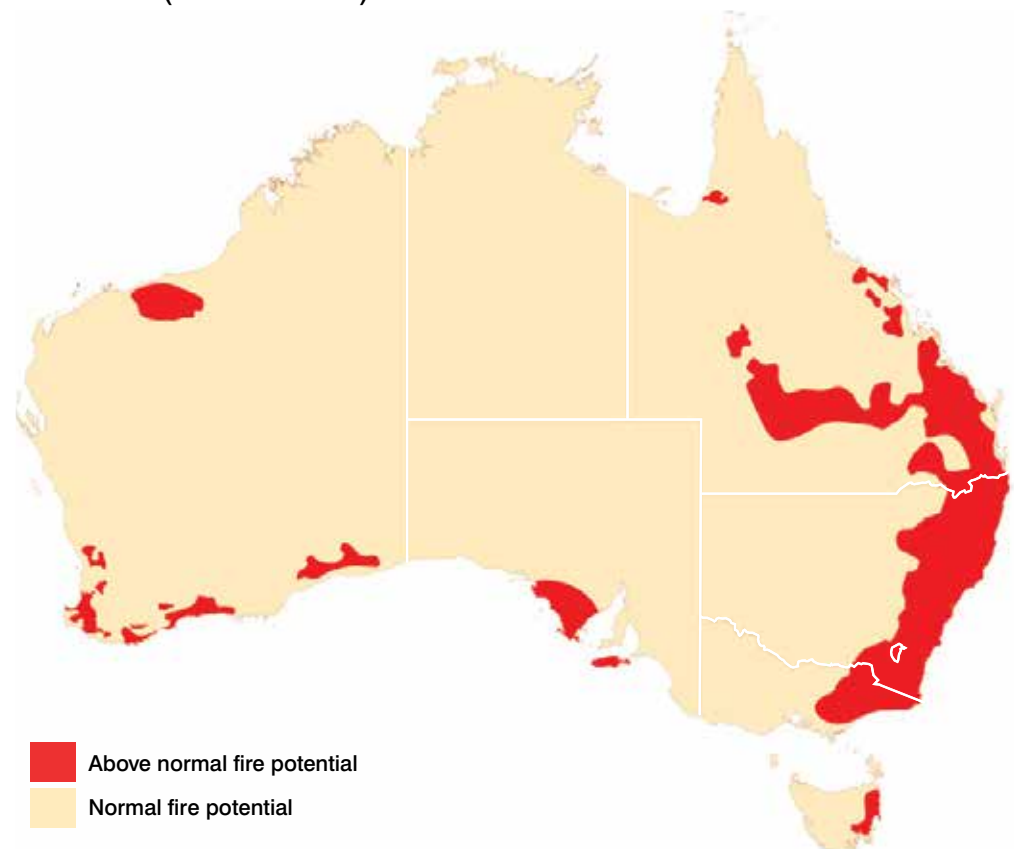
Across the rest of Victoria, mostly normal bushfire activity is expected, however there is likely to be increased growth rates in pasture and crop lands in the west due to winter rain.

There is uncertainty around the effect of the Indian Ocean Dipole and warm/dry outlook, with some risk that ash forests in the central highlands and Otways may dry out at faster rates and become more flammable than normal during summer.

View the full outlook at bnhcrc.com.au/hazardnotes/63

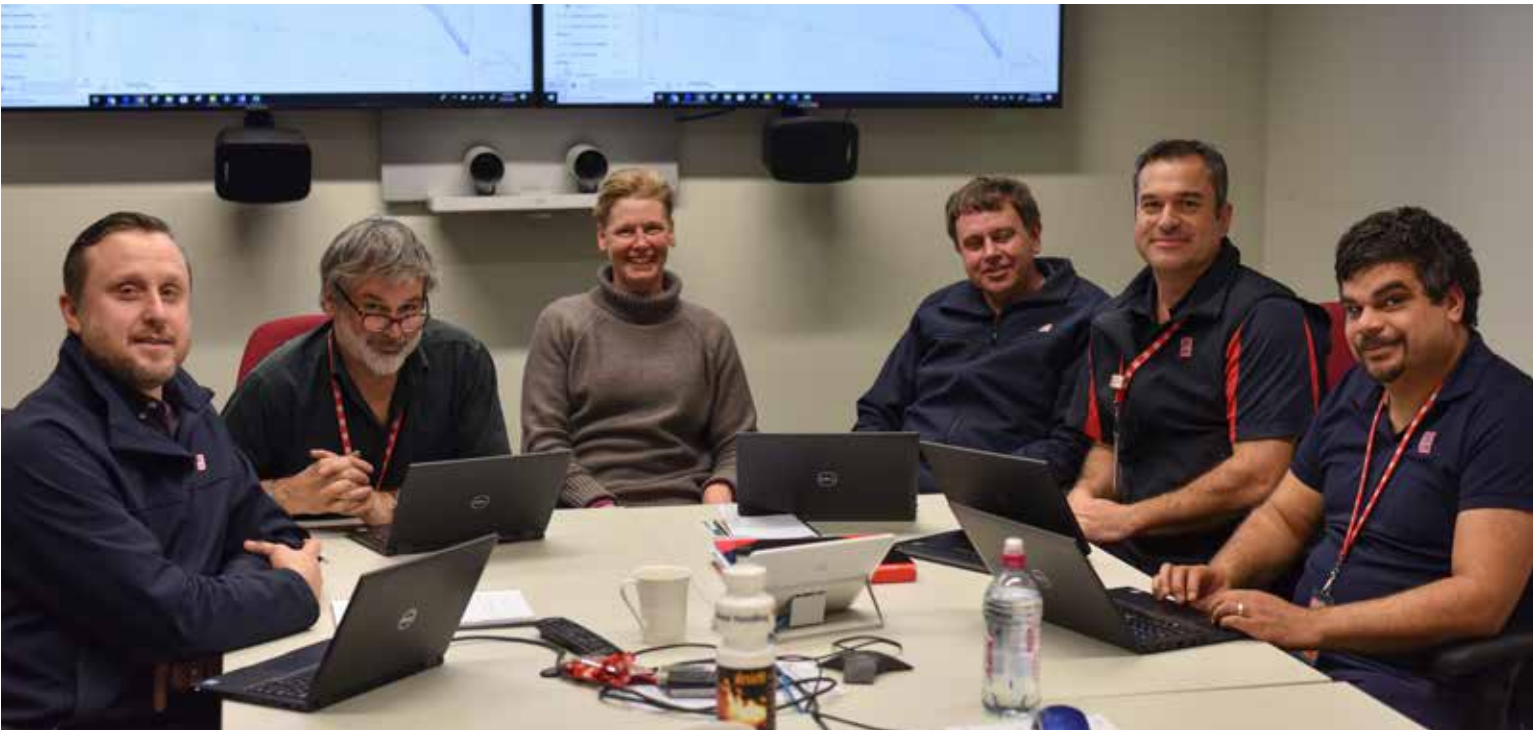
STORY NATHAN MADDOCK, BUSHFIRE AND NATURAL HAZARDS CRC

AUSTRALIAN SEASONAL BUSHFIRE OUTLOOK (AUGUST 2019)



Spotlight on HQ VEGETATION MANAGEMENT





CFA brigades have a long history of providing fuel reduction services to reduce the spread of bushfire and to minimise the impact on their community. This valuable work is performed by brigades in conjunction with a land owner or a land manager such as a municipal council and road or rail authorities. But it's not easy.

Planned burning and other types of fuel reduction such as mechanical removal can be dangerous and cause harm to assets or the environment. Most of this risk is taken care of at the planning stage, often long before a match is dropped. Planning and approval for a job is complex, time consuming and technical. So, who in CFA does this work?

CFA provides vegetation management as a support service. Vegetation management officers and vegetation management support officers, who are based in the regions, look after the planning process from nomination of a site through to approvals and scheduling of resources for delivery.

In turn, regionally-based Vegetation Management staff are supported by a small crew of specialists who take care of decision support tools, reporting systems, and the technical advisory services.

The Vegetation Management team in East Burwood is part of the Bushfire Portfolio managed by Deputy Chief Officer Bushfire, Alen Slijepcevic.

The design and implementation of systems that control and report on the CFA fuel treatment

planning process is overseen by the Manager Planned Burning Terry Ouroumis. Terry's career has been in forestry and planned burning with the public land manager. He joined CFA Vegetation Management in 2010.

The team is headed by Owen Gooding. Owen comes from a land management and fire prevention background in local government. He joined CFA in 2005 working with the land use planning team, and investigations into bushfire house loss including the Black Saturday Task Force, and joined Vegetation Management in 2010.

Daniel Idczak keeps the team's services and projects running smoothly as the vegetation management coordinator. Like Owen, Daniel has had a career in land and fire management working primarily for local government. He also brings a wealth of experience in business management and training.

Technical services are provided by four team members who are specialists. Native flora and fauna protection is managed by Biodiversity Advisers Dale Tonkinson and Justine Leahy. Aboriginal and historical cultural heritage services are provided by Cultural Heritage Adviser Mick Sherwen. Fire behaviour, risk management, and coordination of planned burn training is provided by the planned burn coordinator. This role was carried out by Roger Strickland before his recent retirement.

Mick Sherwen is CFA's first ever cultural heritage adviser, joining CFA after a career in fire management with DELWP and its

From left to right: Daniel Idczak, Owen Gooding, Justine Leahy, Dale Tonkinson, Terry Ouroumis, Michael Sherwen

predecessors. Mick went on to be a heritage advisor for DELWP before switching to CFA in 2018. As a Victorian Aboriginal man, Mick brings a wealth of cultural knowledge and connections. Combined with his technical expertise and passion for sharing knowledge, Mick is a great asset for CFA as we begin to build our capacity in heritage management.

With the impacts of climate change on the environment and bushfire risk, fire prevention will be more important than ever. Fuel management is key to reducing bushfire risk, and demand will increase. The team understands that everything CFA does to improve its capacity to deliver fuel management will improve the outcomes for community and firefighter safety.

As a bonus, by doing things in a smart and safe way, we learn a lot about our relationship with fire, how fire is expressed in our unique flora and fauna, and about Aboriginal cultural heritage.

To read more about planned burning at CFA, go to <https://www.members.cfa.vic.gov.au/mycfa/Show?pagelid=plannedBurning>

STORY OWEN GOODING

Improving fire safety at Mt Buller

During the snow season the number of visitors to Mount Buller peaks at 16,000, and half of these stay in accommodation on the mountain. Fires caused by chimneys, heaters and cooking are common, and a lot of the accommodation owners lack appropriate procedures or awareness to safely evacuate guests if there's an emergency.

In 2018 a CFA North East Region team, comprising the manager of community safety, commander, Volunteer Sustainability team representative, community education coordinators and fire safety officers, knew there was an urgent need to improve the situation. They analysed the causes of fires and current management practices in the event of a fire, and then developed an engagement strategy.

Accommodation managers were given warden training, information and help with evacuation drills. The warden training was funded by CFA, but was carried out by an external consultant who specialises in alpine resort planning. Team members also visited their properties to give fire safety advice.

An owner's and manager's information pack was developed to support the property visits. It included:

- a winter property assessment checklist
- a fire safety management and evacuation plan
- fact sheets about fire equipment such as hose reels and emergency lighting
- fire orders.

Visitors were engaged through displays, social media and local media campaigns, and brochures.

An important part of this project was the series of conversations CFA staff had with the Resort Management Board (RMB), and the relationships they developed with its members. Initially, a presentation was given to lodge owners and managers, which also included a short preseason briefing by all emergency services.



"It's all about building relationships. By doing this we ensure ongoing improvements to safety for the community," Commander Paul Scragg said. When looking back at the success of this project, the team realised that the sequence of the project's initiatives contributed to the successful uptake from management. As each event unfolded, the opportunity was used to promote the next activity. This allowed participants to build on their knowledge and put into practice the lessons learned.

The RMB and wider Mount Buller community is now more aware of fire safety issues, and this makes it easier for CFA to engage them on a range of issues. Initial feedback from the RMB and accommodation managers has been extremely positive – many appreciated the support and the collaborative approach.

The RMB is keen to continue working with CFA, and the team hopes that any resources developed will be cobranded to show a united approach and to reinforce the importance that Mt Buller places on fire safety.

At the beginning of the 2019 snow season, the team again travelled up the mountain to deliver a range of fire safety initiatives including successful warden training sessions, hosting a morning tea, and helping train staff to carry out evacuation drills.

The Mount Buller Engagement Project is a good example of how to design a suite of education and awareness activities targeted at a specific group of people facing particular risks. The project's achievements are a strong start to improving the safety of visitors to this alpine region.

STORY DUNCAN RUSSELL



Teamwork and a defib save the day



PHOTO: COURTESY OF ARARAT ADVERTISER

Equipping every CFA brigade in District 16 with a defibrillator paid off in spades when longstanding volunteer Craig Cheesman's heart stopped during a group training exercise in October last year. The volunteers were part of a training exercise in Gre Gre when Craig stumbled and fell down.

Gre Gre Village Fire Brigade Captain Peter Knight immediately called for assistance for a medical emergency. But when Craig went into cardiac arrest, Peter started CPR while still on the phone to Triple Zero and called for assistance from other crews via radio.

The St Arnaud brigade tanker and St Arnaud Group FCV responded quickly, bringing their on-board automated external defibrillator (AED).

St Arnaud members Simon Elliot and Dave Reynolds (an Ambulance Victoria community officer) took over from Peter and with help from Tom Hamilton (Slaty Creek brigade) continued CPR and set up the AED. They delivered two shocks and were able to get Craig's heart beating again.

The first Ambulance Victoria unit arrived a few minutes later. On-duty AV Community Support Paramedic Matt Pearce, who is also a Warrak brigade member assessed Craig and requested an Advanced Life Support (ALS) unit, two Mobile Intensive Care Ambulance (MICA) paramedics and Helicopter Emergency Medical Service (HEMS).

The helicopter transported Craig to Ballarat Base Hospital in an induced coma and he didn't wake up until four days later.

Craig, who has since received coronary treatment under the care of a cardiologist in Ballarat, said the doctors had told him "the work the boys did on me was the most important part.

"Because they did such a good job, that's what got us through. I was lucky, really."

District 16 Operations Officer Owen Tudball commended the CFA members who banded together on the day to save their fellow member's life with the help of Ambulance Victoria paramedics.

"There were some undeniable life-saving actions by this group performing under the added duress of direct association, in addition to the unquestionable value of providing early access/availability of a defibrillator," he said.

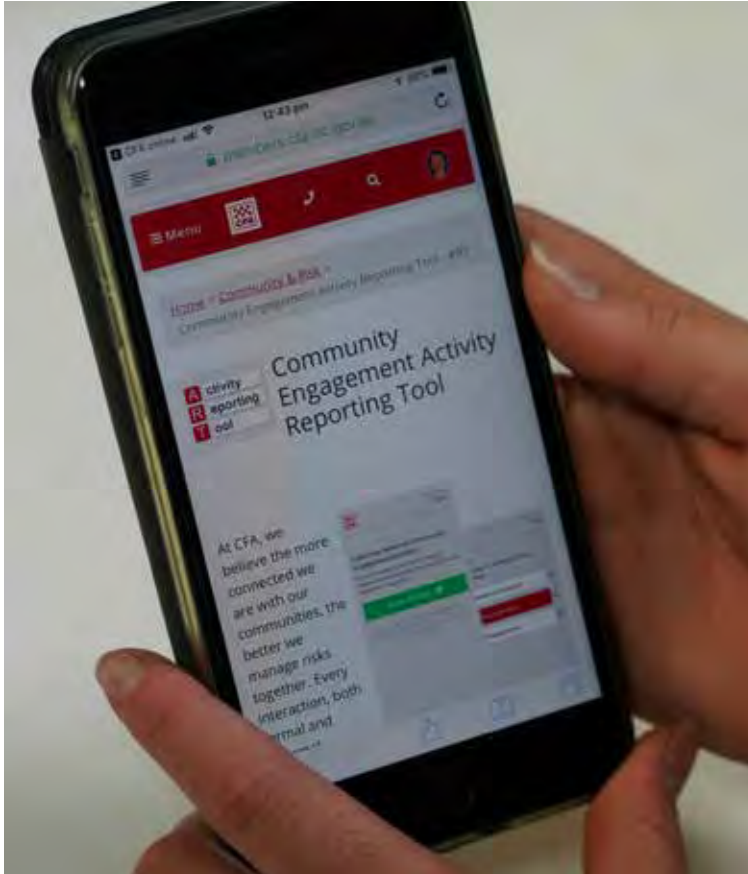
"This was a fantastic example of working together and with fellow emergency services colleagues to achieve our mission."

As a result of their efforts, six members from St Arnaud Group received a Chief Officer's Commendation.

Last year District 16 received funding through the State Government's Enhancing Volunteerism Grants Program for its Defibrillator Project so that 54 defibrillators could be installed in tankers. The grant means all brigades in the district now have a defibrillator on their tanker or in their FCV, and every group FCV.

STORY LISELOTTE GEARY

Recording community engagement using the internet



Imagine if with one simple click you could see exactly what community engagement services were delivered by CFA members in a specific area by a particular brigade, on any given day.

Early in 2019 CFA's Fire Prevention and Preparedness department (formally Community Safety) identified an opportunity to make this a reality to improve data collection around community engagement activities in CFA.

A web-based activity reporting tool (ART) application was developed through a process of consultation with stakeholders in the field, and statewide staff and volunteers in Community Safety, Business Intelligence, Performance Improvement, ICT and Legal Services.

This interim solution replaces the current CRM for activity reporting, as the CRM is outdated and unsupported. The purpose of the ART is to ensure CFA captures this data while the new CRM is being developed.

The consultation process identified several important issues including developing a common set of definitions for community engagement activity, a set of business rules for how activity is counted and recorded, and a need to record special data about activities to link risk information with planning and reporting purposes. Existing and current systems can't meet all these requirements.

The Community Engagement ART will be used to record information about CFA's interactions with communities. It's a statewide platform that

helps develop a complete picture, with accurate reporting on delivery of community engagement activities across all CFA areas. The system allows all types of activity to be recorded whether it's face-to-face, with a group of people, or at an event.

"ART sets CFA up for success in this data driven age. This tool gives us an immediate and complete picture of community engagement activity and performance," Executive Manager Fire Prevention and Preparedness Lucy Saaroni said.

"We can use information about what we delivered, when, where and to whom, to see trends and make improvements to our work."

ART works on Apple and Android devices and works with a range of browsers including Safari, Microsoft Edge and Google Chrome. It's estimated to take less than five minutes to complete a data entry, depending on the level of detail. There's also an anonymous survey so users can give feedback about the tool to allow CFA to finetune the product.

The tool isn't available offline yet, though the ART development team has said this could change as the application develops.

"It's easy to access and simple to use, and we are likely to see even more advancements with the tool over the next 12 months," Lucy said.

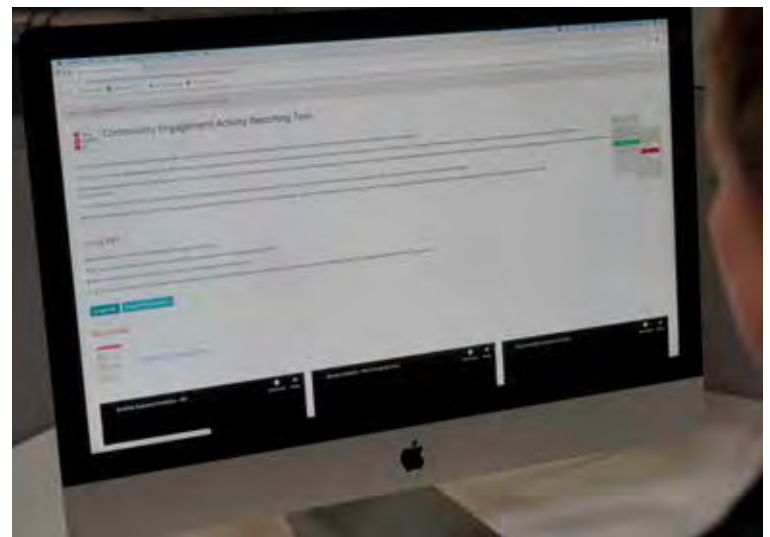
"Most importantly, ART offers us a mechanism to recognise the time and value of CFA members when they engage with communities to prepare them for fires."

Olinda volunteer Elissa Jans is a group and brigade community safety coordinator, and very active in CFA's community education events and programs.

"Reporting gives visibility. If everyone uses it, it's going to give CFA an accurate picture of everything our staff and volunteers are doing in the real world, on the ground," Elissa said.

"It helps brigades to show districts what we're really doing, helps them to justify resources and apply for funding, because we're able to show exactly what programs we're using, and how we are reaching and engaging with our communities."

STORY DAISY CLELAND



MORE VOLUNTEER PAD INSTRUCTORS FOR WANGARATTA



VENTC Wangaratta Campus has reopened after major renovations and changes to the training area. There are now new concrete areas, updated gas training props and enhanced water delivery systems to support training well into the future.

Before its official opening at the beginning of August, practical area drill (PAD) staff and volunteer instructors prepared to deliver skills maintenance training sessions to the volunteers of North East Region.

Volunteers who nominated to become volunteer PAD instructors attended a weekend course which included an induction to the site and detailed explanations of the processes that lead to a successful training session at the campus..

Twenty new volunteer instructors from brigades in districts 12, 22, 23 and 24 were introduced to their new role by PAD

Supervisor Richard Gardner and PAD Operator Steven McDonald on the Saturday. The day was spent understanding the PAD area and discussing the 70-odd possible training scenarios that can be delivered to brigade members.

On Sunday, new and existing volunteer instructors met each other and shared experiences.

"It was a brilliant weekend," Cara Disint from Mooroopna brigade said. "It's incredible to see how much time, effort and thought has gone into the redevelopment of the training ground. Between the facility and the high commitment of staff, the learning opportunities are endless."

After attending the two-day induction, Mark Massey from Rutherglen brigade was impressed by the PAD, amenities, props and improvements.

Above: Volunteer PAD instructors Mel Evans, Emma Cleal and Cara Disint

PHOTO: RICHARD GARDNER

"And the respect and discipline shown by the PAD staff for the place was also very impressive. It's obvious the leadership of the team has instilled this into the respectful and humble way in which everything and everyone is treated."

Killawarra brigade's Clayton Henderson thought a highlight of the weekend was seeing the diversity of members and experience in one room.

If you're interested in becoming a volunteer PAD instructor, contact your local training coordinator.

STORY MICK DAWS

Fire safety podcasts for low vision people

The number of people listening to podcasts has grown by 50 per cent in the past five years. Podcasts have become an effective way to communicate, and are a key source of information for those who are blind or have low vision.

In late 2018 and early 2019, the Community Engagement team worked on a series of three fire safety podcasts to modernise the way CFA reaches Vision Australia (VA) clients and radio listeners. VA has 26,000 clients across the country with significant reach to its community through a dedicated radio network of stations in Perth, Adelaide, Melbourne and seven regional Victorian stations and podcast channel.

In early May 2019 VA uploaded the podcasts to its website for people to access at any time. Two of the podcasts focus on bushfire safety and one is about home fire safety. The series follows a narrative about fire safety that's meant to inspire action and conversations within a family.

In the first podcast, Scoresby Fire Brigade member Jim Read talks about the importance of having a home escape plan and working smoke alarms that are interconnected and located throughout the house. The second one looks at how you can stay safe in the summer months, and the third is a conversation with Fiona Macken (pictured), a volunteer at Diamond Creek Fire Brigade and a bushfire safety presenter.

"Being blind or having low vision influences fire safety and what people need to consider to stay safe," Angela Cook from the Community Engagement team said. "CFA needs to provide ways for all people in the community to access fire safety information and education, and this can mean finding alternative ways to present information.

"If you're blind or have low vision it may be easier to listen to fire safety advice, and this is why we've created this series of engaging podcasts."



PHOTO: COURTESY OF VISION AUSTRALIA

CFA plans more collaboration with VA, including future podcasts to keep the conversation going, being part of VA's teleconference service, and allowing regional VA offices to access CFA resources.

The podcasts are available at radio.visionaustralia.org/about-us/radio-news/cfa

STORY DUNCAN RUSSELL

Tax deduction for preparedness and prevention costs

After the 2018 St Patrick's Day fires in south-west Victoria, I met several farmers who were looking to upgrade their fire equipment. But they didn't understand what they could claim in farm taxation.

To help them, on behalf of Landcare I collaborated with the Australian Taxation Office (ATO) and CFA's District 5 headquarters to produce a fact sheet explaining when they can claim a tax deduction on fire preparedness and prevention expenses.

The fact sheet mostly outlines the tax deductions available for various capital costs (business assets) such as quick fill pumps, water tanks and fire dams.

This was a special piece of work because the ATO had not produced this type of information before, even though the ATO is

heavily involved after a disaster. The request for emergency funding in Australia following a major incident is immense, and the ATO can see the value in encouraging landholders to prepare for fire rather than picking up the pieces for years after the event when farmers aren't adequately prepared.

This is a great partnership between the ATO, Landcare and CFA to help farmers better prepare for fires and other disasters, and when CFA volunteers engage their community about fire safety I encourage them to tell local farmers to have a look at the fact sheet.

You can download the fact sheet here: ato.gov.au/law/view/pdf/afs/afs-fire-preparedness.pdf

STORY LISETTE MILL, BASALT TO BAY LANDCARE NETWORK

Fun and games at CFA



The CFA Sports and Recreation Association (CFASRA) was formed in 2005 to support and encourage as many members as possible to participate in and attend CFA sports and recreational activities.

Since 2005 CFASRA has supported a huge variety of activities – with a major focus on the Victoria Police and Emergency Services Games each year, as well as the Australasian Police and Emergency Services Games and World Police and Fire Games.

Over the past few years, up to 200 CFA people have taken part in the Victoria Police and Emergency Services Games. In March 2019, 19 agencies took part in 43 sports.

In late 2018 the Australasian Police and Emergency Service Games was held in Mandurah, Western Australia. For this event, usually around 40 CFA members attend consisting of both staff and volunteers. The event plays host to 115 different agencies from 10 countries, and CFA takes part in of the 49 sports. In 2020 the event will be held in Wollongong in New South Wales.

Current CFASRA President and Secretary Brian Neal has been working with sporting and recreational teams at CFA since 2000.

“We’ve been supporting teams with grants, uniform purchases, sustenance to get through events and participation for nearly 15 years,” Brian said. “We’re a small team at SRA, but we get people involved – we’re really there to promote camaraderie within CFA. It’s not about being the most talented.”

Ongoing support is given to angling, surfing, motorcycling, golf and snow sports clubs which take part in, and hold, annual events.

“We’ve even supported cricket and equestrian teams – any CFA member can apply for support from the CFASRA,” Brian explained.

But it’s not all fun and games. The CFASRA is there to build and strengthen social communities, and to promote and report on the participants and achievements of CFA members in sport and recreational activities.

Executive Director Volunteers and Capability DCO Stephanie Rotarangi is passionate about encouraging CFA members to get involved in sporting activities and events.

“These sporting events bring our people together from all over the state. It’s about taking part, being part of a team, and supporting one another,” Stephanie said.

“There are so many ties between firefighting and playing sport, the camaraderie and mateship, the teamwork and problem solving, as well as the physical and mental challenges. The Sport and Recreation Association has done an amazing job supporting people to get involved and representing CFA.”

If you’d like to take part in a sports or recreational activity, an event, or support other people in various events around Victoria and the world, go to Members Online (members.cfa.vic.gov.au), speak to your region representative, or email sra@cfa.vic.gov.au.

STORY DAISY CLELAND



2019 CFA Photo Competition winners

As part of CFA's celebrations during National Volunteer Week in May 2019, CFA announced the winners of its photo competition. Each entry was considered for its reflection of CFA's values, storytelling and creativity.

Congratulations to Luke Commisso from North West Mooroopna Fire Brigade for winning the amateur category. Luke's photo depicts one of CFA's core values of teamwork. No matter what lies before us, no matter what challenges we face, we all come together to work as a team.

Congratulations to David Barton from Korumburra Fire Brigade for winning the professional category. His photo titled Not Done Yet was taken in Yinnar, Central Gippsland during the 2019 fires.

The winners were given their prizes by Executive Director Volunteers and Capability Steph Rotarangi and Strategy, Planning and Risk Executive Director John Haynes.

Shown right are David Barton and Korumburra brigade First Lieutenant Matthew Haines, who received their prizes from Steph.

Thank you to everyone for entering.



Left: Luke Commisso's photo won the amateur category

Right: David Barton's photo won the professional category





Child safety at CFA – what’s the story?

Did you know that CFA interacted with more children last year through junior activities, school and kinder visits, open days, community events, mobile education activities and kids visiting stations than we attended incidents? That’s a lot of kids!

And that’s a big reason why we need to make sure our organisation is safe for them. The child safety team has been working industriously with people all over CFA to spread the word about how to keep our kids – as well as children and young people in the community – safe at CFA.

Members of the team have been travelling around the state, and so far they’ve presented at more than 55 staff and volunteer meetings and forums. We’ve worked with the Communications and Stakeholder Engagement team to design some fantastic information posters for brigades (some is shown on this page), and

coordinated a mailout to everyone involved with the Junior Brigade program (including the parents of our Junior members and young senior members).

The team has also been working with the Wellbeing and Integrity teams to make sure that any complaints or concerns are well managed, and that children and their families are supported. We’ve also advised CFA’s educators about our legal obligations to be a child safe organisation.

So why are we doing this and why is it relevant to your brigade? The goal is to create an environment at CFA that’s safe and welcoming for community members of all ages; for children who are part of our organisation,

and for those who we interact with every day in the community. We want to be a safe place for all children including those who are from Aboriginal or Torres Strait Islander communities, who are from culturally or linguistically diverse backgrounds, who are living with a disability, or who identify as LGBTQI+.

CFA members not only have the job of

fire prevention and response, but they are also trusted to interact with kids in the community in all sorts of ways. Through our work we must ensure we meet our legal and moral obligations to protect children in our organisation.

We’re also reviewing a range of programs, events and activities to make sure they are as safe as possible for children and young people. In some cases, this means we have temporarily suspended programs so that they can be improved and reintroduced better than ever.

To help us make CFA a safe place for children, we’ve been trying to reach out to as many of our people as possible to let them know what their responsibilities are and how to meet them. We’ve developed an online learning module that all CFA members can access via the Learning Hub (members.cfa.vic.gov.au) and we’ve delivered a number of face-to-face sessions at brigades around the state. The Community and Risk intranet page also has links to resources.

Formal policies are being developed, and we are ensuring that we consult at every step of the way, but there are so many things you can do now to help children be safe in CFA: have a

look online at the Child Safety Hub; complete the elearning module; and include child safety on the agenda at your next BMT meeting. You can also ask any questions by emailing childsafetyofficer@cfa.vic.gov.au.



Updated Brigade Management Manual

In June we released the online version of our updated **Brigade Management Manual** following a comprehensive review, and collaboration with more than 100 subject matter experts across the organisation and VFBV. The online version can be accessed at cfa.vic.gov.au/bmm.

The online manual is interactive, with quick links to important information and useful resources. We encourage all our members to familiarise themselves with the manual, whether for a refresh on various subjects or understanding of amendments to procedures and programs.

In addition to the online version, a hard copy version has been printed and each brigade will receive a copy. Distribution will be facilitated through district offices and due to the large

volume, we ask that brigades remain patient while we work through the logistics of the distribution process.

Whilst it will be great for every brigade to have a hard copy of the new manual, it's worth periodically checking the online version because it will be updated as needed.

To ensure CFA continues to provide the latest information to our members, we want feedback from you about this manual. You can provide suggested updates relating to both content and design to bmmfeedback@cfa.vic.gov.au. We will collate the feedback over the next 12 months to incorporate into the next review and update.

STORY MEL CAUSER



New award honours community for bravery

A new CFA award will recognise members of Victorian communities for bravery and service to their communities.

The Citizen's Commendation Certificate acknowledges a community member who has performed an act of bravery at a fire or provided exemplary service in connection to CFA or for their communities.

The award will be presented throughout the year as needed, and CFA brigade members can nominate people who they think deserve to be recognised for their brave actions and support and commitment to the health and safety of their own communities.

CFA has also updated the criteria for its Chief Officer's Commendation Letter to include members of the community.

This award acknowledges outstanding performance of operational or administrative duties, contribution to their communities, and those who carry out their duties without any thought of personal recognition.

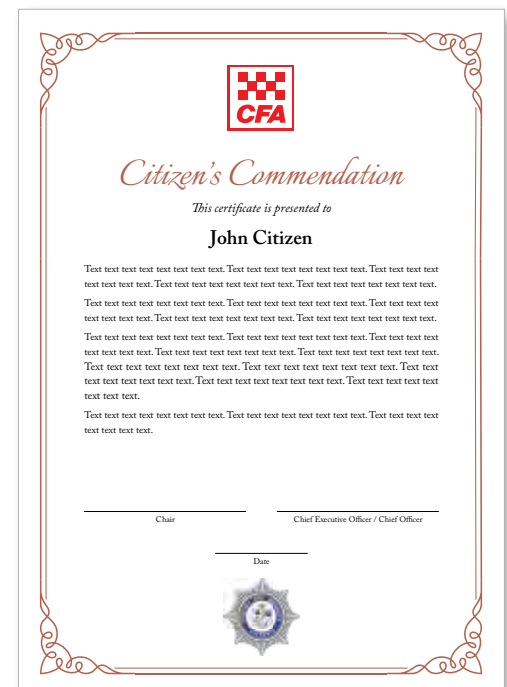
"Through our awards program, we recognise the amazing efforts of our people, as well as members of communities, who go above and beyond at key incidents," CEO and Chief Officer Steve Warrington said.

"This new award also allows us to acknowledge members of the communities in which we operate for not only their bravery but for their commitment to supporting CFA and its mission."

Both awards have been endorsed by the CFA Board, and nominations for the certificate can be related to any incident from 1 July 2019 onward.

Visit the awards website to find out more: cfa.vic.gov.au/awards. If you have any questions contact CFA Honours and Awards on **9262 8842** or email cfa-awards@cfa.vic.gov.au.

STORY SHAUNNAGH O'LOUGHLIN



Minty joins Narelle as a CFA volunteer

Narelle Brown has been a CFA volunteer and has worked in Ferntree Gully and Woori Yallock incident control centres for more than 22 years. She's a Level 3 planning officer and has previously been a fire investigator and air observer with Warrandyte Fire Brigade.

Seventeen years ago, Narelle went through a traumatic experience which resulted in several medical issues including post-traumatic stress disorder (PTSD) and depression. This impacted Narelle's work in CFA incident management teams, as she struggled to cope with being in a crowd and in close proximity to others.

In 2016 Narelle contacted Assistance Dogs Australia in NSW – and Minty was the result. Minty is a Labradoodle who has been trained as an assistance dog and has been by Narelle's side since November 2018.

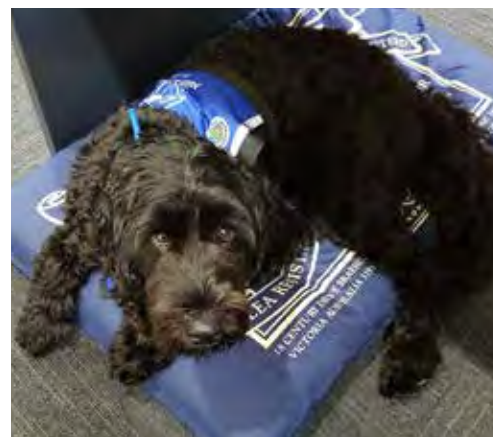
The two-year-old pup has given Narelle the freedom to go unaccompanied by family or friends in public spaces, including shopping centres, restaurants and to work at her position in the family business.

"Minty helps me with the anxiety of going into crowded spaces, and allows me the freedom to be independent," Narelle said. "I can take her wherever I go. I can be alone and be comfortable.

"Minty calmed everyone, not just me, during my time at the Woori Yallock Incident Control Centre covering the Cambarville fire earlier this year. Minty has shown she can improve the morale of the whole team during the long hours of campaign fires, especially during hot start days at Ferntree Gully Incident Control Centre."

"Having Minty has really given her the spirit to continue her work with CFA," Narelle's husband Colin and acting operations manager said. "It improves the general office morale and has really turned Narelle's life around."

Narelle has again put her name down to work in incident control over the coming fire season and has hopes there will be more opportunities for her to take on roles at CFA – with Minty by her side.



"I'd love the opportunity to go away with a team and do incident control at other control centres over the next few seasons. Minty has given me the confidence to know I'm ready to take on new challenges and have the support to complete them. She's changed my life."

STORY DAISY CLELAND



An equitable, inclusive and respectful workplace

The Inclusion and Fairness team was established in 2017 by CFA as an initiative under the Victorian's Government's Fire Services Statement to address the need for increased diversity and inclusion in the CFA.

The team's promotion of increased inclusion and fairness at CFA focuses on everyone playing an active role in building a cohesive and safe team environment where people are valued for their skills, experience, capability and perspective – a workplace in which all CFA people engage with each other and the broader community equitably, inclusively and respectfully.

Inclusion means valuing and providing equal opportunity to all employees and volunteers to achieve their maximum potential at work or while volunteering without discrimination. Fairness means impartial and just treatment without favouritism or discrimination.

To support headquarters staff this financial year CFA recruited an inclusion and fairness coordinator in each of our five regions. They give CFA headquarters staff an accurate and informed understanding of the experiences of CFA people across Victoria. Travelling throughout the regions, the coordinators have established strong links with CFA leaders and teams including those in operations, training, volunteer support, community engagement and wellbeing.

Valuable insights from the field enhance the coordinators' ability to identify and respond to key themes, issues and opportunities by enabling and supporting the promotion of inclusion and fairness. Regional knowledge plays an essential role in establishing the structures, systems and processes that will ultimately enable us to integrate the principles of inclusion and fairness into all aspects of our work.

"I'm encouraged to see staff and volunteers starting to consciously think about putting an inclusion and fairness lens over their work and seeking our advice about how to promote these important principles, such as consulting on creating accessibly-formatted online content for vision-impaired people," South West Region Coordinator Libby Symons said.

"Promoting and supporting increased inclusion, fairness, equity and diversity at CFA is critical to our organisation's aim to truly represent the diversity of the community it serves, because you can't be what you can't see," North West Region Coordinator Nicky Haslinghouse said. "Change is slow, but it's clear we're helping CFA people across the state to better understand the value of championing inclusion in all that we do."

STORY BONNIE HEALEY



Steph's teamwork pays off

Stephanie Habibis has been a part of the St Leonards Indented Head Fire Brigade almost all her life. However, it has only been in the past five years that her involvement became official, when she registered as a brigade support member in 2014.

During her time in the brigade, Steph has been a highly-active contributor, and will give almost anything a go. She has a near perfect attendance record for Sunday rosters, as well as at fundraising and community events that the brigade is involved in. She's well known in the community because of her friendly and outgoing personality and her enthusiasm for being a volunteer.

Steph has been supported by the other members in undertaking a multitude of roles within the brigade. With supervision, she helps with everything from fire equipment maintenance, fire plug inspections, and station maintenance including gardening and station cleaning duties, hose rolling, maintaining stock levels of food and cleaning supplies, community barbecues and fundraising.

"I sweep the floor of the engine bay, make sure there's enough stuff like serviettes, sauce and cleaning items on the barbecue trailer," Steph said. "I like being responsible for getting ready to do the barbecues. It's my job to give out the drinks."

"I help with writing shopping lists and doing shopping. I help to wash the fire trucks. I put labels on things so people know where they go. I help make sure people get the fire plugs checked."

Her commitment to getting the job done certainly keeps the brigade members on their toes.

"People sometimes forget to do things, so I remind them that we need to do it, and I like to make sure all the things get done because it's important. I make sure people know what they need to do so they can get it done."

Steph also played a pivotal role in the concept and development of the Nelson Park Volunteering with CFA program, and participated in the initial pilot. From this, she continues to grow in confidence and develop her leadership skills with the support of her fellow brigade members.

She is a big fan of teamwork because jobs get done more easily. She particularly enjoys taking part in the foreshore market barbecues, annual Santa Run and the Good Friday Appeal for the Royal Children's Hospital.

"I like working with other members of the brigade," she said. "They help me a lot and I help them a lot too."

"I like talking to people and doing good things for other people. I like handing out lollies to kids to make them happy. I collect money for the children's hospital to help out the sick kids."

Having Steph in the brigade brings out a level of compassion, patience and understanding with the other members, and an appreciation for giving things a go – because if she can, anyone can.

Steph's commitment to the brigade and getting things done has been recognised in a couple of ways this year. Not only did she receive the Captain's Award at the brigade annual dinner, she has also been elected as the team leader for fire plugs at the brigade elections, which is a fantastic achievement.

Steph's contribution to her brigade and community demonstrates that with a great attitude and a supportive environment, everyone can contribute at CFA.

STORY LIBBY SYMONS



PHOTOS: COURTESY OF ST LEONARDS INDENTED HEAD BRIGADE



SEASONAL FOCUS



CHIEF OFFICER'S EXPECTATIONS

Our fire season is rapidly approaching and early indications suggest there is potential for significant fires around our state to occur during spring.

For the past few years I have communicated my expectations that all operational members of CFA complete Minimum Skills, the hazardous trees package (every three years) and the entrapment drill (annually). Our district leadership teams have asked me for further clarity so in response I provide the following:

- Before any firefighter responds to a fire, they need to have completed wildfire Minimum Skills, the hazardous trees package and the entrapment drill.
- All districts must ensure they allocate time and resources to support brigades and groups as a priority to undertake these activities and consider innovative ways to help our members.

- Crew leaders are able to 'sign off' members as having completed the hazardous trees package and entrapment drill as a way of reinforcing their knowledge and supporting captains and training officers by spreading the load across the brigades and groups. Captains (OICs) of brigades remain accountable for ensuring this is applied to their brigades in accordance with 'Standard Operating Procedure 2.01 - Brigade Officers - Responsibilities of'.
- I ask our leaders at every level to discuss with their teams the requirements and accountabilities detailed in 'Standing Order 6 - Training & Competence' and 'Standing Operating Procedure 6.04 - Firefighter Skills - Development and Maintenance of', which have been in place for many years.



To read the Chief's full expectations turn to page 50.

Yinnar tanker struck by tree

Introduction

Imagine starting your shift at a raging fire. The steep terrain is covered by dense vegetation, with erratic winds causing intense fire activity. In the dark of the night visibility is poor. The air is filled with smoke and the sound of the firefight. Your job is simple: protect assets and put out anything on fire. Over a few exhausting hours, you battle difficult conditions to save isolated properties. All is going well, until you hear a loud crack above you.

You don't have time to think about the large branch suspended over your truck, or your fellow crew members hosing down that very tree. What should you do?

There's one crew that already knows the answer because they were faced with this scenario. They've shared their story here so that others can learn from their experience and avoid a similar accident.

"It doesn't worry me [sharing my experience], if it's going to improve something down the line somewhere," one member said.

Incident overview

In the words of one crew member, "It was a tough night". They were part of a strike team tackling the Yinnar South fire, which had been sparked by lightning two days earlier and was now burning in a tough landscape known as Heartbreak Hills. All crews had been briefed on various hazards including the

presence of falling trees throughout the fireground, though they weren't given any specific warnings.

The strike team and a DELWP crew were mainly tasked with blacking out burning vegetation in an effort to stop fire breaking out and threatening more Jumbuk Road properties. The bush road, which forms a loop with O'Reillys Hill Road, was too narrow to allow overtaking. The strike team had to drive single file around this loop, with the lead tanker peeling off to the refill point and rejoining the line an hour later,

At about 4am, when the crew pulled up behind a tanker which had stopped at the loop's narrow refill point, their only focus was "anything on fire".

The tanker crew found themselves next to a steep bank and there was a large tree a metre away with a small fire burning in its trunk. The crew assumed the burning tree was safe because several other crews and full strike teams had already driven past it, reportedly dousing it numerous times. From the road the two-metre wide eucalyptus looked structurally solid. However, appearances at night can be deceptive.

The crew leader and driver were in the cabin and three members in the rear. One was hosing off the left side of the road while the other two were directly hosing down the tree when they heard a loud crack. The heavy branch above them snapped off and it was too late to do anything.



Left: The crew was on board when the first branch fell

Right: The tree fell on the tanker hours after the crew left the scene

It landed on the centre of the truck, missing the crew on the rear who dived for cover and were protected by the rollover protection system bars (ROPS). The cabin was hit the hardest and after holding for a minute, the centre of the roof began to cave in. The crew leader immediately exited the tanker to check on his team and then issued a mayday call over the radio. Apart from some scratches, no-one was injured and the crew abandoned the vehicle, (leaving the engine, lights and handbrake on as protocol dictates) in case further vegetation fell onto the tanker.

They made their way towards their strike team leader, who went to their assistance after hearing the loud crack, and were transported to the staging area for debriefing and release. The crew was shaken but otherwise unharmed. The damaged tanker was left in situ until it could be safely retrieved by a recovery team which arrived about five hours later. During this time the entire tree collapsed, causing significant damage to the tanker.

The tanker driver was at work the next day when his partner called him after seeing an image of the tanker on the front page of a newspaper. The photo of the crushed tanker led readers to believe the crew had been on the tanker when the tree fell. In reality, the damage occurred hours after the crew had left the scene. This was the first of many inaccurate media, internal CFA and social media commentary, which caused distress to the crew, their family members and communities.

All crew members were all up-to-date with their tree hazard awareness training and never thought this would happen to them. "Over the years, I've heard it happen to other people but you don't realise it can happen to you.

"We just didn't spot it...It could have happened to anyone."

Lessons identified

Following procedure: After the initial incident, the crew was understandably disappointed that the tanker sustained further damage. However, if the tree had fallen while they moved the tanker from beneath the branch, the crew could have suffered serious injuries or even death. They made the correct decision to leave the vehicle for the recovery team to safely retrieve. While the damage to the vehicle was costly to repair, the safety of crew members is paramount.

Communication: The tree that fell had informally been flagged by a different crew earlier that day. However, the night crew was never given this specific information in their briefing. It's vital that everyone follows the correct communication procedures to ensure important information is passed on. Crews are actively encouraged to speak up at their briefing and ask questions if they feel information is lacking. 'Salmon Cards' (Incident Report Cards), hazard reports and CFASafe, can also flag hazards. At incidents where a safety officer is appointed, pass on hazard information to them.

Distance from a hazardous tree: The tanker was about one metre from the base of the tree that eventually fell. One crew member commented that next time they would probably re-assess the distance. However, given the incident occurred in the early hours of the morning in darkness, tree hazard assessment would be difficult for anyone.

Changing risk: Before the incident, the crew had responded to very intense fire activity. They went from a high-pressure firefight to a seemingly safer blacking out task, spending a few hours stationed near a property not under immediate threat. The stark contrast highlights that risks are always present on the fireground.



Risk assessment and size-up: From the road the tree looked to be structurally solid. A 360-degree size-up, verified by someone qualified to assess and treat, may have led to a different outcome.

ROPS: The truck was fitted with ROPS which protected the crew from the falling branch.

Learning from experience: Crew members wanted to tell their story and reflect on the incident in a no blame, no fault environment. This has enabled all of us to learn from their experience and reflect on how we would have reacted in the same situation.

Misinformation: Firefighters and their families should discuss how the spread of misinformation can lead to distress. Emergency situations can be frantic and sometimes misleading, or false information can be unknowingly shared despite good intentions. Everyone should be aware that information, particularly on social media, which has not been distributed by an official source (such as EMV), verified ("CFA has confirmed that...") or reported by multiple outlets, could be misleading and damaging.

Conclusion

Working in demanding environments is typical for a firefighter. As conditions change we need to continually reassess where we are, who is with us, what we are currently doing and what we need to alter. This dynamic risk assessment allows us to enact our 'Safe Person Approach' when we can't change the environment. Be sure to practise, taking six seconds for safety every time something changes. Talk as a crew and don't be afraid to speak up. Your family wants you to come home.

After reading this case study, consider what actions you would take if confronted with a similar incident and think about:

- would you do anything differently if your brigade responded to a similar incident?
- has your brigade completed the hazardous tree package?
- would you recognise the signs of a hazardous tree?
- who would you tell or contact if you recognise a hazardous tree during your operation?
- if faced with a similar situation would you know how to enact a mayday?

Hazardous trees

Falling trees, limbs and branches can strike operational personnel and members of the public, block access along roads, designated escape routes or fire control lines, or can be a traffic hazard.

A weakened tree structure is a heightened risk and is an important hazard to be aware of. All personnel should be able to identify tree hazard markings and be able to use barrier tape to establish exclusion zones, and request expert assessment and treatment.

How to identify hazardous trees

Look up for:

- hung-up branches
- tree lean
- branch or trunk defects
- effects of wind on the tree

Look down for:

- trees with exposed dry wood
- exposed roots
- defect in lower trunk
- active fire or smoke at base of tree

Look around for:

- trees affected by fire
- trees beside roads and tracks
- diseased, stressed or drought-affected trees



Message from the Chief Officer

- Complete your Tree Hazard Awareness training. Discuss the risks of tree hazards at your next brigade meeting.
- Never park or work under hazardous trees.
- Discuss tree risk during your safety briefings.
- Maintain situation awareness and continually reassess the risk.

More information

<https://files-em.em.vic.gov.au/public/Safety/Tree-Hazard-Mitigation-Matrix.pdf>

<https://files-em.em.vic.gov.au/public/JSOP/SOP-J08.03.pdf>

<https://files-em.em.vic.gov.au/public/Safety/TreeHazardPictorialGuide-2017.pdf>

<https://files-em.em.vic.gov.au/public/Safety/SFS-Tree-Hazards.htm>

TREE HAZARD MITIGATION MATRIX

JSOP 8.03 - TREE HAZARD - BUSHFIRE (SCHEDULE 4)

	SOUND TREE PRE & POST FIRE	POTENTIAL HAZARDOUS TREE PRE FIRE	HAZARDOUS TREES PRE FIRE	CPD TREE POST FIRE
DEFINITION	<p>SOUND TREE</p> <p>An assessed sound tree that is not currently hazardous and is not likely to become a clear and present danger tree (CPD) when exposed to fire or other disturbance associated with the incident.</p>	<p>POTENTIAL CPD TREE – PROTECTION ASSURED</p> <p>A tree which in its current state does not appear hazardous, but may become a CPD tree if it catches alight or is impacted by wind or other fire-related disturbance.</p> <p>It has a high probability of surviving the fire intact based on the proposed protection measures and likely response resources available.</p>	<p>POTENTIAL CPD TREE – PROTECTION NOT ASSURED</p> <p>A tree which in its current state does not appear hazardous, but may become a CPD tree if it catches alight or is impacted by wind or other fire-related disturbance. It does not have a high probability of surviving the fire intact based on the proposed protection measures and likely response resources available. The tree may partly or wholly fall and impact personnel (but is not expected to do so during the time frame of the current operation).</p>	<p>CLEAR AND PRESENT DANGER TREE</p> <p>A tree or branch that is likely to fall within the expected time frame of the current operation and impact personnel in its potential impact zone.</p>
MARKING SYMBOL	NO MARK - APPEARS SOUND	YELLOW DOT	YELLOW X	YELLOW K

Entrapment drill



Fire behaviour is hard to predict, so everyone needs to be prepared. There's no substitute for practising the entrapment drill, especially when it involves ensuring clear communication and safety of crews during an emergency situation.

Seconds are critical. Repeated hands-on training on how to run an entrapment drill and perform it well could make all the difference for your and your crew's safety.

Always maintain situational awareness

Basic checklist

1. Look at your options and immediately act on the best one. Options other than the vehicle may be available.
2. Use all PPE/PPC.
3. Protect your airway.
4. Ensure the pump is running.
5. Account for all members.
6. Locate blankets.
7. Delivery lines turned off, except on deck.
8. Operate hazard lights, headlights and emergency warning lights.
9. Engine running fast idle 1000rpm minimum.

Cabin

- Mayday if appropriate.
- Close windows and vents. Turn on air con in recirculate mode.
- Roll down crew protection curtains and seal.
- Activate crew protection sprays just before impact of heat and flames.

Rear deck

Where fitted with ROPS canopy:

- Sit in crew ROPS and deploy/secure crew protection curtains.
- Take charged hose line with fog branch into your safe area.
- Cover yourself with dry fire blankets for additional protection.

Backup

- If the crew protection system (sprays) fail, use fog branches directed towards heat source from deck area.

When the danger has passed and it's considered safe, exit the vehicle.

Safety notes

- Ensure crews are briefed and understand the fire conditions.
- Crews operating a tanker with a crew protection spray system should ensure this is operational when attending bushfire and/or planned burn incidents.
- Ensure there are sufficient protective fire blankets for all crew members and all pumps and crew protection systems are tested and in working order.
- Consider conserving water to extend protection by deck-mounted branches or crew protection sprays.
- In the event of an entrapment situation, do not hose down crew members prior to the firefront passing, as damp clothes or wet fire blankets may cause steam burns.
- If an incident involves several vehicles, group them together and park command and control and/or slip-on type vehicles as close to the leeward side of tankers as possible. If it's safe to do so, members in command and control and/or slip-on type vehicles should exit and take refuge in the cabin or on the deck of tankers.
- If the crew protection spray is unserviceable during bushfire or planned burn sessions, it must be reported for priority repair to CFA's district mechanical officers. In this instance, the vehicle may continue to be used for emergency response, subject to the vehicle's crew leader doing a dynamic risk assessment and setting in place mitigation actions for the safety of the crew. Where possible an alternative vehicle should be considered.

More information

Follow SOP 9.32 Entrapment Procedures for Appliances

<https://www.members.cfa.vic.gov.au/mycfa/Show?pageld=displayDoc&docId=004921>

Lessons learned from entrapments

Introduction

Since CFA's beginnings in 1944 there have been several major fires and incidents that have shaped our organisation and the direction of rural firefighting. In the 1983 Ash Wednesday fires, 11 CFA volunteers and one casual firefighter died when their tankers were burnt over. Another tragedy was the 1998 Linton fire where five CFA volunteers lost their lives after their tanker was trapped and burnt over.

Improvements in training and equipment following such burnovers has helped to prevent similar tragedies. Since 2006 there have been no serious injuries or deaths to CFA firefighters despite multiple entrapments. But we mustn't become complacent.

CFA members have survived entrapments because, despite the chaos of the situation, their **regular training and situational awareness meant they knew exactly what to do**. We must continue this annual training so that everyone comes home safely.

Background

Entrapment is a life-threatening situation for all firefighters. The circumstances leading up to entrapments mostly result from sudden changes in fire intensity and direction, usually following a wind change or from underestimating the fire behaviour. Due to the loss of situational awareness, there's often very little warning before the crew is overrun. In some cases, the change in fire behaviour can occur so suddenly that there's very little time to do anything, which is why it's so important to rely on your training and the systems.

Our tanker protection crew systems have been evolving ever since the deployment of standard tanker design and heat shielding after the 1977 Western District fires. Following the Ash Wednesday tragedy, the tanker fleet was upgraded to all diesel-powered vehicles and pumps, and research was completed into fire resistance materials for tankers. Significant crew protection component research and changes in firefighter safety started after the 1998 Linton fire.

Post Linton, crew protection systems installed on new tankers include personal protective radiant heat shield blankets, low level water indicators, water spray deluge systems, internal cabin drop-down radiant heat shielding, additional radiant heat shielding around water pump systems and vulnerable tanker components, a reduction of plastic materials on the external surfaces of tankers, metal air cleaner filters, and flame-resistant hoses and cabling.

Since 2000 all crew members require minimum firefighting skills to be able to respond operationally, and our training emphasises situational awareness. Even with improved situational awareness training, CFA entrapments have still occurred. However, there have been no serious injuries or deaths since the tanker crew protection system was installed in 2006.

Recently CFA assessed critical control measures for entrapments and applied these across a series of incidents and near misses that occurred between 2009 and 2015. There were positive results in the areas of people and equipment,



Above: Before and after shots of a tanker caught in a burnover

largely because of the enhancements in crew protection systems, the adoption of Minimum Skills training, and the yearly compulsory entrapment drill.

Understanding the environment at a particular moment is imperative to improving safety. However, increasing the level of overall situational awareness can be extremely difficult when working in unfamiliar surroundings. The crew leader's ability to pre-empt sudden danger relies on a variety of environmental considerations. What's the weather doing? Is there a forecast wind change? What personnel do I have and what is their experience? What is my plan if something goes wrong? Have I identified an anchor point? Do I have any triggers to adjust my plans?

Recently we have also seen increased awareness and compliance with critical doctrine such as entrapment procedures, LACES, rural/urban interface firefighting and situational awareness.

It's important to recognise that, one of the key control measures when dealing with an emergency incident is to ensure CFA members are well prepared to manage the risk. This preparation includes knowledge through education, skills through training, ability through experience and practical application, all supported by appropriate personal protective equipment.

It's very important to report entrapments or near misses to CFA, so that we can further understand the effectiveness of improvements we've made over recent years. You should use CFASafe on the intranet or Incident/Near Miss Report Cards (salmon cards) to report these instances.



Lessons identified

By analysing entrapment and near-miss incidents, we've identified the following lessons.

Personnel capability: Agencies need to ensure that the capabilities of the personnel on the fireground are suitable for the tasks to be performed.

Radio communications: An effective communication plan is vital and must cater for all people deployed to the incident.

Firefighter safety: Monitoring your surroundings and constantly reviewing your assessment of the potential hazards is critical to safety. This includes identifying and reporting near-miss incidents. Wearing appropriate protective clothing contributed to the crews' survival. Training on how to protect yourself in extreme fire behaviour is critical to firefighting safety. Reconnaissance and local knowledge (knowing the area) is an important part of managing the risks of firefighting.

Near-miss reporting: By reporting near misses quickly through the incident organisation structure, incident controllers can provide important and timely advice about firefighter safety.

Information flow: The key role of all personnel is to manage information through the incident organisational structure and ensure they have what they need to make effective and appropriate decisions.

Everybody is responsible for passing on information about fire location and behaviour through the incident organisational structure. This is one of the most important tasks of all personnel at the incident.

The use of Red Flag Warnings must only be to provide information, not directions to fireground commanders.

Firefighter welfare: Fatigue and stress affect the quality of decisions made by firefighters and those managing the incident, and this needs to be recognised by the people managing fires and those coordinating response to fires.

Firefighter comments

Thanks to CFA's safety procedures numerous firefighters have survived entrapments over the years. Here are some of their comments.

“ The crew on the back discussed strategies in preparation for possible worsening conditions later in the day. This included starting the pump and checking for prime as well as talking through the emergency drills, and then getting the blankets out and putting them in a quickly accessible position.”

“ The crew's survival is a direct result of their training and the way they all reacted. All crew had practised burnover drills and safety and survival training a number of times as part of their pre-summer preparations. The crew mentioned how their normal reaction was to panic, however they kept their composure and clear thinking throughout the ordeal despite the frightening conditions.”

“ One of the brigades undertook more detailed drills and familiarisation sessions on each appliance in their brigade [in addition to mandatory training]. These crew members all emphasised during interviews the benefits of the training and how it made them feel confident during the response and the entrapment. It was also apparent that this crew was more comfortable with their performance as a team prior to and during the entrapment.”

“ The crew had undertaken a burnover drill prior to the fire season and so were versed in the process to protect themselves in a burnover. The flames breached the heat shields on the appliance and the deployment of burnover protection worked effectively. Without this, it is entirely probable the injuries would have been more severe.”

“ The Chief Officer's requirement for pre-season mandatory burnover drills clearly prevented further injuries to the crew at the rear of the appliance.”

Volunteer injured falling from tanker

Introduction

District 13 volunteer firefighter Pamela was seriously injured and missed several months of work when she fell from her brigade's tanker in July 2018. Her story is a reminder that common, everyday tasks still pose risks which, if you are not careful, could impact both your CFA and personal life for months.

Incident overview

On the day of her accident, Pamela was participating in an exercise which involved significant map reading and hydrant inspections. Pamela had to regularly climb in and out of the tanker. After the tanker and its three crew members had returned safely to the station, Pamela opened the passenger door to exit the cabin rearward as she had done numerous times already that day. She held onto the handles at the door's base and placed her feet in the foot well steps below. However, as Pamela was reaching for the wheel rim step, she lost her footing and fell backwards onto the concrete. In reaching out to break her fall she landed on her arm, fracturing her elbow.

"I knew I'd broken my arm the moment I fell. I was in excruciating pain," Pamela said.

Brigade members immediately provided first-aid and called for an ambulance. Pamela spent a week in hospital, where she underwent orthopedic surgery to insert metal plates and screws in her arm (see photo). She missed more than ten weeks of work.

A year on, Pamela is still unable to return to active operational firefighting duties, and in addition to the physical limitations Pamela has struggled with the emotional impact of the injury.

Pamela couldn't lift and carry her two young grandchildren, which restricted the simple activity of babysitting on her own. An activity Pamela loved became an impossible task. "Life was difficult with one arm," she said.

Thankfully Pamela is now looking forward to a return to active duty, but she won't forget her experience over the past year. "The pins in my arms will not be removed, and they are a constant reminder to me about making sure I do the right thing.

"You need to take the time to be conscious about how you take each step."

What worked well

Response: Pamela's fellow crew members immediately responded to the situation. They gave her first-aid and called an ambulance.

Peer support: Pamela praised the peer support from her brigade and district, and the help for her husband on the night of her injury.

Lessons identified

Three points of contact: Firefighters should ensure they always have three points of contact when entering and exiting vehicles. Following this incident, CFA's wellbeing team produced a '3 Points of Contact' poster which was sent to every brigade to help raise awareness.





Vehicle familiarisation: Wheel rim steps on a vehicle can be slippery and care must be taken to stand directly on the top rather than part way around the sides. To help you enter and exit the cab, all trucks have grab handles that must be used. They may be a dark colour and difficult to see at times, but it's crucial you know where they are on your brigade's trucks.

Gloves: Pamela's gloves were fairly worn and had smooth palms which may have reduced their grip. Gloves should be inspected regularly and replaced when they have reduced grip.

Situational awareness: On the night of the accident the weather was cold and wet, and the truck's steps were slippery. The soles of Pamela's boots were also slippery and covered in mud. If possible, wipe your boots and always be aware of your surroundings.

Managing fatigue: Before the fall Pamela exited and entered the cabin at least nine times as part of the training exercise. She was tired and realises now that she should have spoken up and suggested to her captain that her workload be redistributed.

How to address lessons identified

- Place the 3 Points of Contact poster in a useful position so members will see it
- Discuss falls from trucks as a safety share at meetings
- Ensure drivers consider their passengers' abilities to get in or out of a vehicle safely
- Remind each other of the safest way to get in and out of the brigade's trucks
- Familiarise yourself with the steps and grab handles on your brigade's trucks
- Maintain the grip on both footholds and handholds
- Consider other factors that may affect your ability to get in and out of trucks such as how tired you are, the protective clothing you normally wear, and items you are normally carrying.

Conclusion

It can be easy to overlook the safety risks of simple tasks when you regularly face fires and other hazardous situations. This case study shows we can't be complacent about the risks of falling from trucks. Pamela needed surgery and missed several months of work, as well as not being fit for operational duties. Taking an extra few seconds to safely exit the cabin could be the difference between responding to an emergency or spending 12 months on the sidelines.

Preventing truck injuries

CFA is continuously receiving injury claims from members who've hurt themselves getting into and out of cabins, rear deck areas and using ladders. There have been numerous incident reports involving falls from trucks resulting in serious injuries, and the number is likely to be much higher because of unreported incidents.

Stepping on, entering the cabin or crew area, stepping off the back deck and using a ladder, are everyday activities that can cause significant injuries to staff and volunteers.

The main causes of falls from a truck are human error and failure to follow the 'three points of contact' rule. This rule requires at least three points of contact to be maintained with the vehicle at all times – two hands and one foot, or both feet and one hand. This allows maximum stability and support, reducing the likelihood of slipping and falling.

The illustrative poster below is the outcome of an investigation agreed by HSEW, F&EM investigators and an investigation review panel.

3 Points of Contact

Entering and exiting CFA vehicles and climbing ladders safely are important actions that are often overlooked. CFA members have slipped and fallen, resulting in ergonomic strains, sprains and broken bones.

Always face the vehicle or ladder when climbing down

Two hands and one foot are used to position the body for safe entry, exit or climb

Use your hands to hold yourself in place. Securely grip hand-holds or handles while one foot safely supports your weight

While going up or down, your movement should be slow and steady to avoid injury from slips, falls or striking other objects



Getting on and off the vehicle

- Whenever possible park the vehicle in an area free from hazards.
- Check the area for traffic before entering or exiting the vehicle.
- Before stepping off the vehicle, check for uneven surfaces such as potholes or kerbs which may cause you to slip.
- Don't jump down – this is bad for your knees and you're more likely to fall.
- Always use steps and handholds if provided.
- Take your time to climb down from the cab, load area or catwalk facing the vehicle and use the handholds.
- When entering or exiting CFA 4WDs, hold onto the door or steering wheel to help maintain your balance.
- Watch your head clearance.
- Dry your hands/clean your gloves and wipe excess mud off your boots for surer grip.
- Don't rush to climb out after a long shift.
- Descend slowly to avoid straining a muscle.
- Be extra careful when working in inclement weather.

Maintenance

- Report missing or damaged equipment.
- Carry out pre-use checks on your vehicle. For example, check steps and handholds are in good condition.
- Report any damaged/worn holds that could cause a fall.
- Always inspect your vehicle and the area surrounding your vehicle before entering or exiting the vehicle:
 - Survey the environment for items such as ice, grease, oil, debris, rocks, potholes, uneven surfaces
 - Survey the vehicle for cracks or excessive wear to the access points such as steps, handholds, etc
 - Ensure vehicle clutter is removed and equipment secured to avoid trip hazards when entering or exiting.
- Check the treads on your footwear regularly and replace as needed.

Three points of contact sounds simple, and you probably already do it most of the time. But it's that one time you don't that can land you in trouble.

Fatigue

Fatigue is similar to feeling tired but it is not the same thing. When you are tired you yawn and stretch and feel like taking a break. When you are fatigued your brain begins to lose its 'thinking power'. You can lose track of what you're doing and start to make simple mistakes.

Have you ever been so exhausted you forgot basic procedures, or made simple mistakes? Fatigue poses significant safety risks on the fireground, because it can lead to:

- poor decision-making
- reduced emotional control
- reduced situational awareness
- increased injury risk
- impaired focus and difficulties with concentration
- reduced physical coordination and balance
- microsleeps

The impact of 17 hours without sleep is equivalent to a blood alcohol level of 0.05%. At 24 hours, this increases to 0.1%.

Managing fatigue

Below are the actions to take to manage fatigue.

Risk level	Possible individual actions	Possible supervisor actions
Moderate	<ul style="list-style-type: none"> • Advise supervisor of status • Optimise hydration and nutrition • Ensure breaks are taken • Start double checking • Rotate tasks 	<ul style="list-style-type: none"> • Increase frequency and duration breaks • Start monitoring behavioural and task symptoms • Rotate tasks • Implement double check
High	<ul style="list-style-type: none"> • Advise supervisor and team members of status • Maintain hydration and nutrition • Move to lower risk tasks • Defer non-urgent tasks • No solo work • Power nap • Start requesting cross checking (second set of eyes) on key tasks • Caffeine 	<ul style="list-style-type: none"> • Switch to lower risk tasks • Advise team members of status and ask for their support in looking out for and managing risks • Further increase break frequency and duration • Advise resourcing centre of status • Obtain second opinion for key decisions • Increase monitoring of fatigue symptoms • No solo work • Support power napping • Defer non-urgent tasks
Extreme	<ul style="list-style-type: none"> • Stand down • Get home safely • Sleep 	<ul style="list-style-type: none"> • Stand down • Get home safely • Sleep



Dehydration

Dehydration is an excessive loss of salt and fluids from the body. While firefighting you can lose over one litre of fluid per hour which significantly increases the risk of dehydration, exhaustion and heat stress.

Dehydration can lead to:

- fatigue
- reduced motor coordination
- headaches and/or dizziness
- reduced speed, endurance and aerobic exercise capacity
- reduced situational awareness, alertness and concentration
- irritability
- death

Signs of dehydration

- Headache
- Thirst
- Dizziness
- Nausea
- Cramps
- Cool hands and feet
- Lack of sweating/dry skin
- Dark yellow urine

Risk factors for dehydration

- Increased intake of caffeine, saturated fats and energy drinks
- Alcohol consumption
- Some medications (including antihistamines, antidepressants and some blood pressure tablets).

Preventing dehydration

Ensure you drink plenty of fluids before physical activity. Don't wait until you are thirsty to drink water, because by that time you are already dehydrated.

The recommended daily intake is eight glasses for women and 10 for men.

On days where you engage in intense physical activity, or in extreme weather conditions, it's recommended that you drink up to 1200ml of water per hour with a 600ml electrolyte replacement drink each hour.



Aviation awareness

During the 2018-19 summer season there was an increased number of near misses surrounding ground crews being impacted by firebombing loads on the fireground, be it directly or by drift. Luckily there weren't any serious injuries but it's worth remembering that **firefighter deaths have occurred overseas in very similar circumstances** where the firebombing load dislodged large tree branches which impacted crews. Fire-bombing safety and awareness is vital for everyone on the fireground.

Firebombing safety

- Suppressants and retardants dropped from fire-bombing aircraft may travel at high speed and the impact can break or dislodge material from trees.
- Low flying aircraft may create turbulence that can also dislodge material from trees.
- Both situations may pose a danger to on-ground firefighters near a firebombing target.
- Ground personnel must be alert, and watch and listen for the noise of low flying aircraft, which could indicate firebombing is imminent.
- If ground personnel are near a firebombing target they must move a safe distance clear of the target area.
- The air attack supervisor and firebombing pilot are responsible for warning ground personnel of incoming drops from firebombing aircraft and ensuring they are clear before allowing a firebombing operation to proceed. However, sometimes they may not be able to see ground crews.
- To assist in alerting ground personnel of impending drops, the pilots of firebombing aircraft with a siren capability will activate the siren prior to and during the release of any load.
- Sirens on firebombing aircraft may be difficult to hear in a noisy environment – for example when vehicles, pumps or chainsaws are being used.



If you are caught in a firebombing drop zone

1. Move safely away from the fireline.
2. Do not run or panic.
3. Watch out for falling branches and debris – firebombing loads can hit with high inertia.
4. Place hand tools well clear of you.
5. Secure your hard hat or protect your head with your arms.
6. Watch your footing – foams and retardant can make the ground surface slippery.
7. If you are hit with foam or retardant, wash off with cold water.

State Airdesk dispatches

There were 1,293 individual aircraft dispatches to CFA incidents recorded on the State Airdesk dispatch system during 2018-2019. This doesn't include training events or joint flights such as reconnaissance runs.

More information

CFA Members website: <https://www.members.cfa.vic.gov.au/mycfa/Show?pagelid=aviation>

Firebombing safety video: <https://files-em.em.vic.gov.au/public/aviation/Video/Firebombing-Safety.mp4>



Aviation awareness tips

Introduction

In the 2018-19 fire season the State Airdesk Dispatch System dispatched 1,293 individual aircraft to incidents – a 67 per cent increase since 2014-15.

Last season there was a noticeable increase in near misses involving ground crews on the fireground, whether directly or by drift. Below, we've outlined some lessons identified during the season by CFA volunteer air attack supervisors (AAS) Mike Carney and Andrew Avent, including some quotes from them. The aim is to minimise risk and keep ground crews safe.

Lessons identified

Incident control: The incident controller informs personnel about the pre-determined dispatch (PDD) aircraft channel as specified in the district communications plan. AASs and aircraft pilots (if there isn't an AAS on scene) are required to communicate with the ground crews. If the channel is changed for some reason, details of the new channel must be passed onto the AASs/pilots. They can only do their job properly by communicating with ground crews.

Contact with aircraft: Ground crews are often scared to talk to aircraft, but aircraft are just another resource, like a tanker, working on the fire.

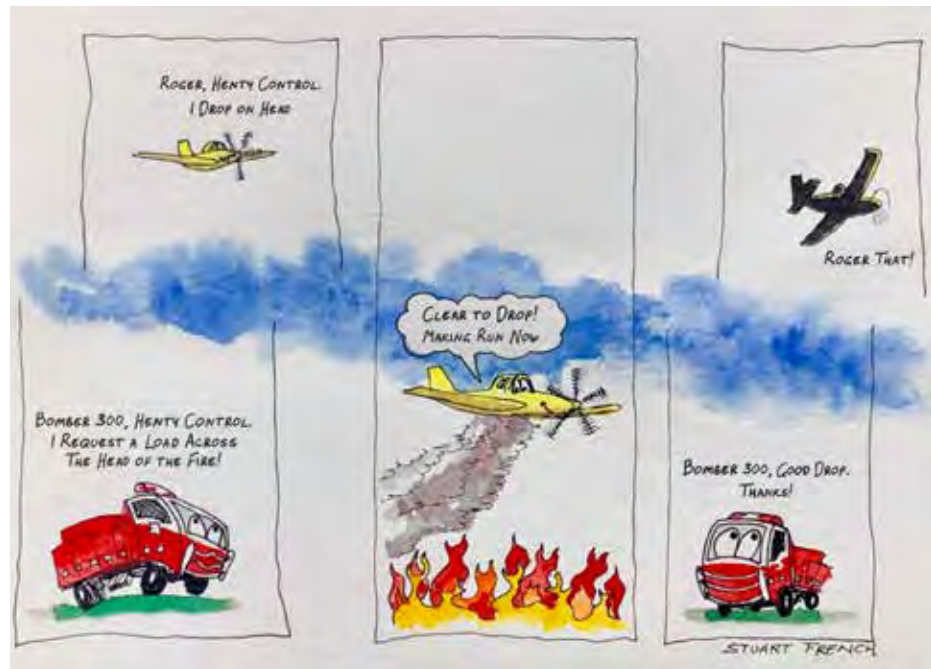
“Ground crews believe that talking to aircraft is a command role and they are not part of the command or directive process. Many of us are volunteers and we are not special. We're just crew leaders in aircraft tankers trying to achieve the same outcome as the team on the ground.”

Work with RDOs: The Incident controllers of level 1 incidents must work with RDOs to establish the aircraft operations unit.

Call signs: Familiarise yourself with the aircraft call signs. More training at brigade level is needed about aircraft types, roles and terminology to help with communications. Bird Dog is a twin engine fixed-wing aircraft, and Firespotter is a single engine fixed-wing aircraft.

“We hear it all: fire dog, firespotter, hound dog and many more. Crews need to know what the AAS platform is at a job. It will be a Bird Dog, Firebird, or Firespotter.”

Help from AAS: An AAS may help you with a size-up and suggest aircraft tasking. The AAS will most likely see spot fires before you do and we will most likely try to contain these before communicating with you.



“Crew leaders may not realise that when we're working an edge we may 'disappear' momentarily to attack a spot fire.”

Take cover: When you're working a fire edge and you know aircraft are working close by, be prepared to move away from the fire edge and take cover if necessary. Your safety is paramount, so leave hoses and gear on the ground and move away quickly. Don't return to the fire edge until you have the all-clear – a second or multiple drops may occur close to the last one.

Use of siren: Not all pilots remember to activate their sirens on a drop. If you don't hear a siren when an aircraft does a drop, notify the AAS who will ensure the siren is activated.

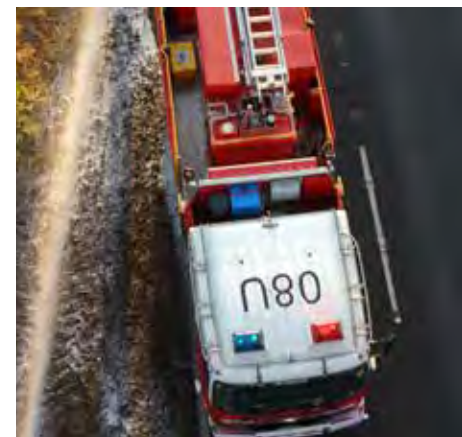
Unsafe release: If there's an unsafe release, tell someone immediately such as the crew leader, sector commander or the aircraft directly. Informing the AAS is the fastest way to prevent it occurring again. The bomber pilots do sometimes listen to the ground chatter on the radio and they will hear you if you call an unsafe drop.

Engage with aircraft: Crews need to be aware that when an aircraft is ready to drop, they need to leave the area and allow the aircraft to drop. Better coordination between ground crews and aircraft will help us to pull up grassfires sooner. Crews need to closely engage with aircraft. This can be simply just

pulling back off the actual drop location, pulling into the black and then getting quickly back onto the drop location and extinguishing the less active fire edge.

“I've seen classic long finger grassfires get away due to a vehicle not moving off the fire attack to allow an aircraft to drop. The best jobs are the ones where you know the lead tanker crew member is aware of the plan, knows the tactics and communicates. It's like poetry when it works.”

Aerial ID code: It's important for crews to know their vehicle's aerial ID code (see photo for an example) and if you hear an aircraft calling your vehicle aerial ID code, pick up the microphone – your life may depend on it. You may be about to be overrun by fire or in the path of a drop.



Plume fire awareness

During the 2018-2019 bushfire season, there were an unprecedented number of 'plume-dominated' fires across elevated ranges of Victoria. Plume-dominated fires are characterised by a large vertical plume or convection column that may extend over many kilometres into the atmosphere.

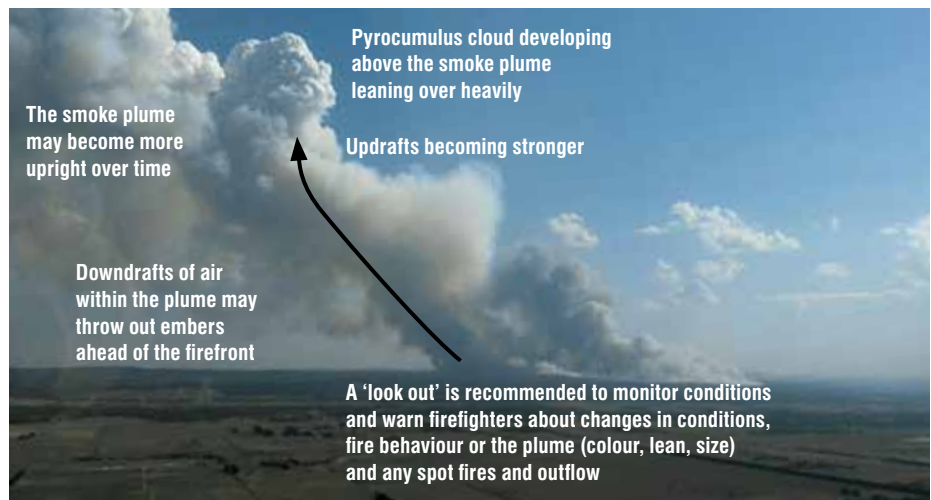
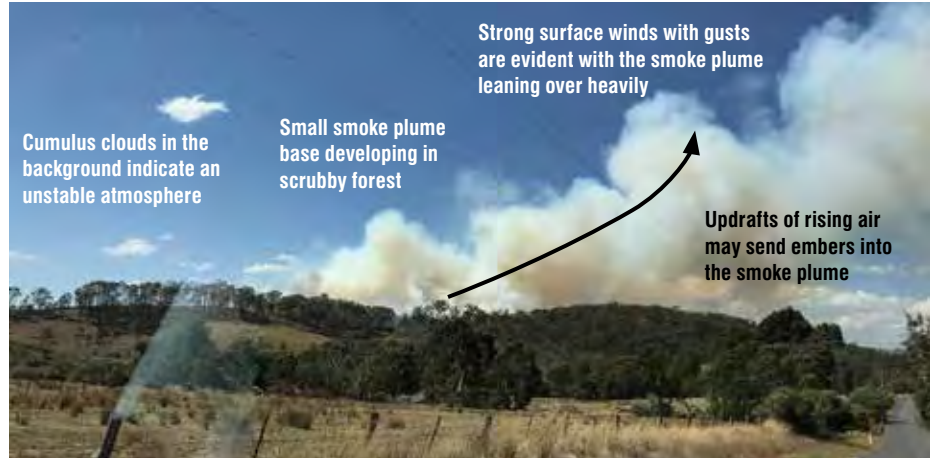
Plume-dominated fires are typically associated with large cumulus (pyrocumulus) or thunderstorm type clouds. Pyrocumulus clouds are not necessarily a concern. However, if well developed they can interact with the upper atmosphere and alter fire behaviour. Changes can be rapid and dangerous for firefighters.

Plume-dominated fire risk factors (even in low-moderate fire danger rating conditions) include:

- unstable atmospheric conditions
- burning forest fuel in hilly terrain
- rapid fire growth/increasing heat release
- incredibly dry fuel bed following years of drought
- a cold front or sea breeze impacting a fire.

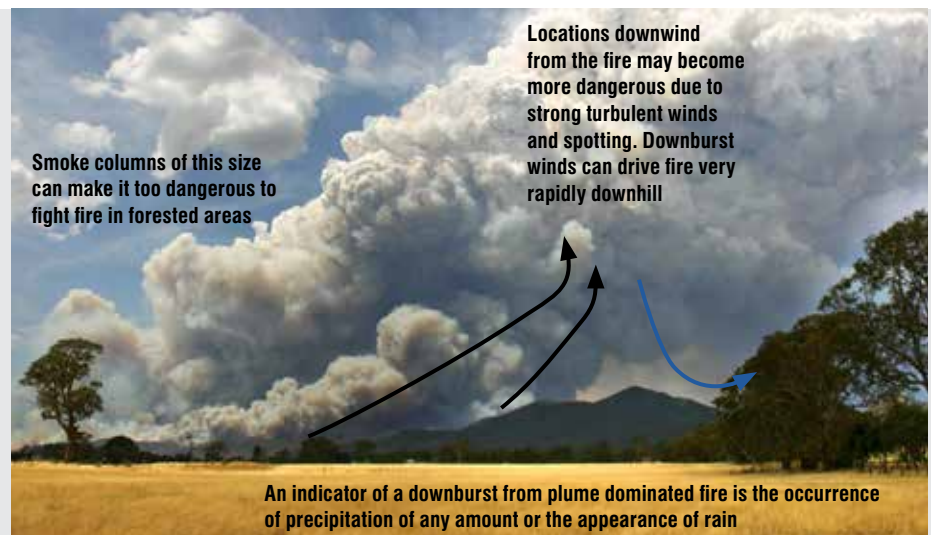
What is pyrocumulus?

Pyrocumulus cloud typically has a crisp, white, fluffy cotton wool appearance. It forms in the upper portions of a smoke plume, often above copper-brown or dark grey smoke. Intense fires with well-developed pyrocumulus cloud may continue to grow into a thunderstorm (becoming pyrocumulonimbus cloud).



Plume-driven fire behaviour can unexpectedly:

- increase fire intensity
- change the wind direction
- change the fire's speed and direction
- increase the amount of spotting
- change the direction of spotting
- generate downbursts and create conditions dangerous for aircraft
- trigger thunderstorms and generate lightning.



For more information contact cfapredictiveservices@cfa.vic.gov.au

Toxic plume modelling

An increasing number of waste fires and their impact on the community has highlighted the importance of identifying and managing the spread of smoke and chemicals. Toxic plume modelling allows us to predict the likely travel and concentration of released products, providing valuable input for community warnings and operational decision-making.

CFA continues to improve capabilities to support this need. We have pre-incident planning models available for an increasing number of high-risk sites, including identified waste sites and major hazard facilities. A real-time modelling service provides a dispersion model from the initial Triple Zero (000) details. This is available for any structure, non-structure, hazmat and related call types and provides initial guidance on the downwind dispersion from an incident.

In addition to chemicals, the toxic plume modelling capability has been expanded to predict dispersion of particulate matter (PM2.5). This provides a capability in line with the Community Smoke, Air Quality and Health Standard exposure guidelines, as well as providing new products such as deposition of particulate on the ground.

Recent incident examples

The 2018 south-west peat fires in the Cobden area generated plumes of toxic smoke containing PM2.5 and carbon monoxide. Plume modelling was used to predict days when nearby communities would be at greater risk. By monitoring wind changes, authorities could forecast the smoke's path and relocate people as needed. The modelling also gave guidance on the ideal locations for deploying air monitoring equipment, which was used to detect areas where residents were at risk of carbon monoxide poisoning.

Plume modelling was also used during the significant dangerous goods waste fires in the Melbourne area over the past 12 months. In August 2018, columns of black smoke from a West Footscray factory fire sparked concerns among Melburnians. More than 140 firefighters responded to the out of control blaze at a warehouse which contained, among other substances, asbestos, acetone and oil. Emergency services used plume modelling to monitor the toxic smoke as it spread across the city's western suburbs. Predictive models and impact assessment tools identified schools and child care facilities that were likely to be affected by emissions from the fire, enabling more than 50 of them to close for the day.

When you should use plume modelling

General triggers for considering plume modelling include:

- where significant and persistent smoke or emissions (products of combustion seen and unseen) are present with potential or confirmed impact on a community
- offsite release of chemical gas or vapour, particularly when there's potential to exceed exposure standards
- where a community warning has been issued or advice given to shelter/protect in place (eg close doors and windows and turn off air conditioning)
- protracted incidents where wind changes may affect fireground operations, such as impacts to rehab/staging or other vehicles and their crews.

In many cases, plumes from large fires may appear to be travelling up above the ground and not threatening the community. However, as the fire is extinguished, a reduction in heat commonly results in the plume remaining closer to the ground and community impact is likely.

There's also the potential for smoke from buoyant plumes to travel over nearby communities and then disperse downward into communities some distance away. In these situations, you may consider modelling for large fires at an early stage before impacts occur.

How to access the service

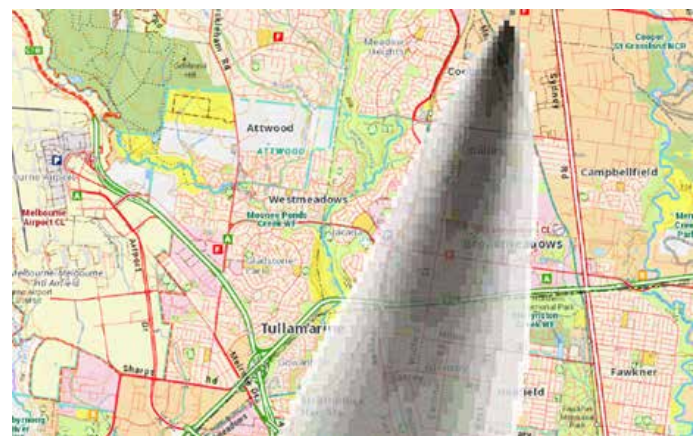
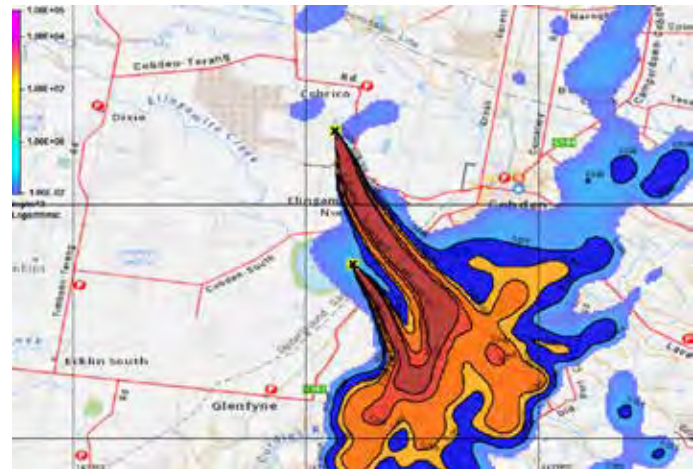
Incident response models are available through the on-call duty scientific officer, who can be contacted through the rostered duty officer. Models can be emailed or viewed online via a link provided at the time.

Good incident intelligence is imperative to accurate modelling. Please ensure the person making the request has access to up-to-date information about the incident such as release scenario, plume observations and local weather conditions.

High-risk site pre-incident planning models are continuously available through a dedicated web portal. Requests for new sites or access to the web portal should be emailed to plumemodelling@cfa.vic.gov.au

Modelling requests for exercises and general enquires should also be sent to this email address.

Note that approval from an RDO/catchment officer is required to access this service or to request models.



CHIEF OFFICER'S EXPECTATIONS

Our fire season is rapidly approaching and early indications suggest there is potential for significant fires around our state to occur during spring. Already there have been fires in northern NSW where warnings have been issued and lives and property have been under threat.

The responsibilities and accountabilities of my role are varied. But what occupies much of my thinking is "have I done everything in my power to ensure that our members go home safe to their loved ones?" Every day our firefighters respond to hundreds of fires and incidents and as a result regularly put themselves into harm's way as we undertake our mission of saving lives and property.

Last year fire agencies had multiple instances where trees hit vehicles and many near misses. And despite our best efforts training our firefighters in fire behaviour and how to maintain situational awareness on the fireground, we continue to have burn overs and burn unders at fires.

I am asking for the help of every member of CFA – especially our crew leaders – to turn this around. We owe this to our families and loved ones, our fellow members and ourselves.

For the past few years I have communicated my expectations that all operational members of CFA complete Minimum Skills, the hazardous trees package (every three years) and the entrapment drill (annually). Our district leadership teams have asked me for further clarity so in response I provide the following:

- Before any firefighter responds to a fire, they need to have completed wildfire Minimum Skills, the hazardous trees package and the entrapment drill.
- All districts must ensure they allocate time and resources to support brigades and groups as a priority to undertake these activities and consider innovative ways to help our members.
- Crew leaders are able to 'sign off' members as having completed the hazardous trees package and entrapment drill as a way of reinforcing their knowledge and supporting captains and training officers by spreading the load across the brigades and groups. Captains (OICs) of brigades remain accountable for ensuring this is applied to their brigades in accordance with 'Standard Operating Procedure 2.01 - Brigade Officers – Responsibilities of'.

- I ask our leaders at every level to discuss with their teams the requirements and accountabilities detailed in 'Standing Order 6 – Training & Competence' and 'Standing Operating Procedure 6.04 – Firefighter Skills - Development and Maintenance of', which have been in place for many years.

While we work together to provide opportunities for our firefighters to prepare themselves for the summer fire season, please do not forget:

- hit fires hard and fast
- ensure you do your part to ensure information and warnings are issued to our community members so they can make informed decisions about their safety
- everyone comes home, every time, safely. The safety of our people is my highest priority
- be individually ready, both physically and mentally, for a long season
- ensure your community is ready – engage them and communicate well
- be confident to make decisions at all levels – back your training and knowledge
- work together with all agencies and at all levels: state, region, district, group, brigade and, most importantly, the community.

Demonstrate our values at all times:

- We put safety first
- We excel through teamwork
- We are dynamic and adaptable
- We act with integrity
- We respect each other

Our role in the community is such an important one, and you should all be proud to be part of CFA. I will never underestimate what you all achieve to keep Victorians safe.

Our leaders, at all levels, need to lead by example and focus on doing the right thing, building capability, making accountable decisions and being adaptable. The environment we work in is often complex and dangerous; and we must rise to the challenge, make transparent and timely decisions, and act with integrity at all times.

You should all be proud to be part of CFA. Look after yourself, your families and your teams, and be ready for the challenge our environment presents.

HEALTH MATTERS



New first-aid eLearning package

A new learning package in first-aid is now available for CFA members. The set of modules, available through the Learning Hub, helps you learn basic first-aid skills and gain the confidence to help family, colleagues, friends and community members in health and emergency situations.

This course was developed by CFA's first-aid partner St John Ambulance Victoria, and covers topics such as DRSABCD (danger, response, send for help, airway, breathing, CPR, defibrillator), choking, fainting, wounds, burns, sprains and strains.

It takes about 60 minutes to complete but you can do it in more than one sitting, as responses can be saved and completed at any time.

"By making this module available to our members we have the capacity to increase first-aid awareness throughout the state, which helps us achieve our mission of protecting lives and property," CFA's Executive Manager Training Delivery and Performance Colin Oliver said.

"By completing this package, you can learn the basics before committing to a national-level accreditation course."

St John Ambulance Victoria Business Manager Commercial Training David Loiacono said St John was proud to work with CFA to offer the course.



"CFA is such a vital part of every community and increased awareness of first-aid means safer communities," David said. "If you don't already have first-aid accreditation, I encourage you to jump online and complete this awareness package."

For more information on training in your area, contact your district coordinator learning and development. For more information about this first-aid package contact Jade Turner on **9262 8645** or email j.turner@cfa.vic.gov.au

New mental health support pilot

The State Government launched a provisional payments pilot in July 2019 to cover the cost of mental health treatment for CFA staff and volunteers who have submitted a compensation claim. The 12-month pilot is an Australian first for emergency services workers who suffer from work-related mental health issues.

Under the scheme CFA members can access funding for reasonable medical treatment and services while a compensation claim is being assessed, removing any delay in accessing support services. It covers mental health-related medical expenses for up to 13 weeks once a claim is submitted.

GP visits, medication and visits to psychologists and psychiatrists are among the costs covered by the scheme.

If a compensation claim is subsequently denied, the program still

provides access to paid treatment for a period of up to 13 weeks.

Executive Manager Health, Safety, Environment and Wellbeing Sylvia Hudson said the pilot was a fantastic opportunity for all CFA people to access early treatment for mental health issues.

"We know that early treatment is vital in terms of outcomes for people experiencing mental health conditions, particularly in reducing the long-term impact," Sylvia said.

"This pilot will make a significant difference to anyone in the emergency services experiencing work-related mental health issues, ensuring that they can get help straight away when they need it, rather than waiting for their claim to be approved."

For more information contact the CFA Injury Recovery Support Services Team on **9262 8244** or email injuryrecovery@cfa.vic.gov.au

Learning to manage our mental health

If you've ever been impacted by a mental health issue, you're certainly not alone. In fact almost half of all people in Australia will experience a mental health condition in their lifetime.

That's why it's important to talk about mental health. None of us is immune to impacts to our wellbeing – we're all human after all. Our people, particularly those in first responder roles, are impacted more than most.

One of the goals of CFA's Wellbeing Team is to encourage positive, proactive discussion around mental health. We want to get all our people talking to each other and busting down the stigma around mental health. We need to get to a point where talking about mental health is just as easy as talking about physical health.

We have a range of programs available to CFA members and their families to support their

wellbeing, including the Member Assistance Program, Peer Support and Chaplaincy services, as well as the Let Me Know web-based platform.

But we know that many of our people still don't feel comfortable taking that first step and reaching out for help. We also thought we needed to help people learn how to recognise changes in their own mental health in the moment and become more resilient. The Wellbeing Team also wanted to give people tools they could use to support others to help tackle the stigma.

The result is two courses that are being rolled out on a cascading basis to leaders including PTA staff, brigade management teams and operational staff.

The Working Mind First Responders, being rolled out first, helps people become more aware of their own mental health and how to

recognise mental health concerns in others. The second course, Mental Health First Aid, gives people the confidence to give initial support to others who may be experiencing a mental health problem or emergency. Both courses were funded under the Fire Services Statement, the State Government's \$60m investment in the Victorian Fire Services.

After completing these courses it's hoped that people will see their own wellbeing improve through their enhanced self-awareness. The Wellbeing Team also hopes that people who might need support for their own mental health will feel more comfortable to seek it.

If you'd like to know more visit The Learning Hub (members.cfa.vic.gov.au) or email wellbeing@cfa.vic.gov.au

STORY IRINA TCHERNITKAIA



What is a notifiable incident?

Imagine this scenario. There's an active grassfire and you are on the back of a tanker that's driving at a reasonable speed through high grass. Your crew's task is to put out spot fires as they appear.

You're holding a hose and branch and putting out a spot fire when the tanker hits a medium-sized rock in the long grass. You lose your balance and fall on your side on the deck. You end up severely hurting your wrist. You tell the crew leader about the incident, and they inform the incident controller. Using the chain of command, the rostered duty officer (RDO) is made aware of the incident.

Meanwhile, you are taken to a safe area where paramedics assess you and decide to transport you to a hospital for review. An x-ray finds you have broken your wrist.

After you've been seen by medical staff there are some administrative processes that should be followed – filling out a CFA compensation claim form so you are not out-of-pocket for any medical expenses, and completing a CFA incident report so that actions may be put in place to reduce the likelihood of recurrence.

Due to the seriousness of the injury, CFA now has a legislative responsibility to notify WorkSafe within 48 hours. There's also a requirement to preserve the incident scene, if possible, because WorkSafe may inspect the site. This notification to WorkSafe is usually done by the local RDO or the health and safety duty officer.

According to WorkSafe notifiable incidents include death or serious injury where the person requires treatment as an inpatient, or medical treatment for such things as amputation, serious head or eye injury, electric shock, spinal injury, serious lacerations, or loss of bodily function.

After the incident CFA and WorkSafe may work together to investigate and devise suitable actions to eliminate or reduce the likelihood of a similar incident happening again.

For more information about notifiable incidents, go to worksafe.vic.gov.au

STORY DAVID MACFARLANE

New-look intranet site for HSEW

A famous band once sang, "I still haven't found what I'm looking for." With those visionary words in mind the Health, Safety, Environment and Wellbeing (HSEW) team has acted and is excited to introduce a new-look intranet site. Finding information about health, safety, environment and wellbeing in CFA is now more straightforward.

The HSEW intranet pages (members.cfa.vic.gov.au/mycfa/Show?pageId=healthWelfare) have enhanced navigation so you can find information quickly and easily. On the site, you'll find important HSEW news, updates, alerts and themes. Members accessing the HSEW intranet pages will see new content being added regularly, plus important links to other relevant documentation.

According to HSEW team member Michelle Binns, there will be "less sifting through irrelevant stuff and more access to what's important."

The site also unites CFA's Health, Safety, Environment and Wellbeing teams, with links to each other's pages, to improve information sharing and member engagement.

HSEW-specific branding will be identified at the top right-hand corner of all health, safety, environment and wellbeing documentation and communications. This logo is also a navigation tool on the HSEW intranet homepage – just click on the letter representing the speciality area of choice.

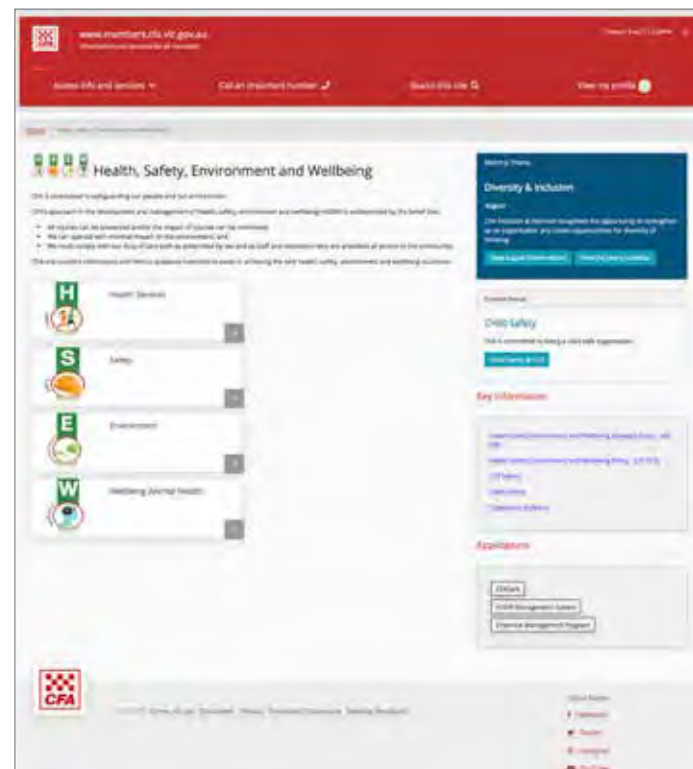
The HSEW team welcomes your feedback because it's an important part of making continual improvements to the site.

CFA members are encouraged to explore the HSEW pages, and share in CFA's vision for a safer, healthier, cleaner and mindful CFA.

The HSEW team wants you to find what you're looking for.

The image below is a screen grab from members.cfa.vic.gov.au/mycfa/Show?pageId=healthWelfare

STORY DUANE KIRK



INCREASING LOWER BODY STRENGTH AND STABILITY

Between January 2016 and December 2018, there were 17 occasions when CFA members fell from a vehicle (five incidences) or ladder (12 incidences).

Improving your lower body strength is a simple and healthy way to improve your ability to mount/dismount CFA trucks and ladders. Not only do you get the health benefits of moving more, but you also improve the support around your joints which reduces the risk of injury and joint pain. Try these exercises.

More information on CFA's intranet

Our Healthy for Life page has a range of exercise posters:

members.cfa.vic.gov.au/mycfa/Show?pagelId=HealthyForLife

Our general exercise programs target the hips and lower body, abdominal stability and shoulder stability:

members.cfa.vic.gov.au/mycfa/Show?pagelId=GenericOnlineExercise

The Health Services page has a range of programs and resources:

members.cfa.vic.gov.au/mycfa/Show?pagelId=Health_Services

Single leg stance

(four sets holding each side for 15 seconds)

Start with feet together. Push one foot into the ground as hard as possible as you bring your opposite knee up to 90 degrees. Hold for 15 seconds with the emphasis on squeezing your buttocks on your stance leg. Repeat on the other side.



Sit to stand

(three sets of 20 repetitions)

Start in a seated position in a chair or on the edge of a bench with arms across your chest, and your feet shoulder-width apart. To initiate the exercise move your weight onto your feet by leaning forward using your trunk. Push your feet into the ground and stand tall before returning to starting position in a controlled motion.



Hip bridge

(complete three sets of 20 repetitions)

Start by lying face up on the ground with knees bent. Focus on pushing your feet into the ground as you push your hips off the ground. Hold for one second and slowly return to the starting position.





PHOTO: KEITH PAKENHAM/AFSM

Reducing the risk for lone workers

There will be many times when CFA members need to work alone, which means if an accident occurs there won't be anyone nearby to help.

Examples of situations where you could be working alone include:

- working in an office environment outside normal working hours
- working out of sight and/or out of sound of other people, such as a fireground or working alone at a fire station
- working in remote locations or isolated workplaces where it may be difficult for others to help you because of distance or topography
- travelling to and from remote locations or isolated workplaces, or through areas where terrain, road or weather conditions may present additional risks.

To maintain safety at all times, it's imperative to have a plan in place before doing the task so that an alarm is raised if a CFA member goes missing. Such a plan could include informing a brigade member, supervisor, line manager or even a family member of:

- the task to be performed
- the location of the task
- how you can be contacted
- how long the task should take
- your intended path of travel to and from the location.

A way to ensure your plan is enacted is by using CFA's Lone Worker Line. This service, provided by an independent company called Well

Done International, is available 24 hours a day, seven days a week. It's especially useful for people who live alone or would prefer to use a third party to ensure their welfare.

To use the service, you phone 1300 654 146 and lodge a 'welfare event' with Well Done International. It may take longer the first time you call because of the setup requirements. The Lone Worker Line operator will ask you for your intended route and estimated time of arrival. You must also choose a 'check-in frequency' which is how often the service expects you to confirm everything's OK by responding to a text message.

If you need to alter your route or estimated time of arrival after setting it up, you have to call the service and alter the terms of the welfare event.

If you don't respond to a welfare check, the information you've provided in advance will allow the operator to pass on your possible location to CFA duty officers who can then attempt to contact you to confirm your welfare. If no contact can be made, a search may be carried out.

When you've completed your journey or finished your after-hours lone work, you need to terminate the welfare event by sending a text message containing the word 'close'.

For more information about working alone or using the Lone Worker Line service, see 'Work Instruction – using the Lone Worker Line' at members.cfa.vic.gov.au.

STORY JUSTIN TILSON

Erika Lind

Mt Taylor Fire Brigade, District 11

faces of
CFA



PHOTO: KATHY LIND

What is your CFA role?

At CFA I'm a firefighter. I also cross-train with Tambo Valley SES Unit's Road Crash Rescue crew. However, my main leadership roles are with Forest Fire Management Victoria (FFMVic) – in fireline leadership roles and as a Burn Officer In Charge for planned burns.

Why did you join?

My father competed in the CFA Rural Championships, and this started me competing when I was 11 years old. I enjoyed the physical nature and challenges of the Championships so much that I completed my Minimum Skills and became a senior member at age 16. Fifteen years on, it's become my career.

What incident has had the greatest impact on you?

When you've attended car accidents and fatalities along the Great Alpine Road you quickly realise the critical reliance on volunteers as first responders at these complex scenes, whether they are Ambulance Community Officers, SES volunteers or CFA volunteers. Back-up crews can be an hour or more away. This was the main reason I started cross-training with our local SES unit and why I became accredited in Road Crash Rescue.

Unfortunately all my skills were needed when we were the first fire and rescue vehicle to arrive at a serious car accident. Stepping out

of the truck to lead a crew at a scene like this can make you doubt your ability. I made a conscious decision to take a breath to settle the adrenaline and objectively get my head around what was in front of us.

This job was a test of balance between patience and urgency, strength and sensitivity, empathy for anxious local bystanders and objectivity towards the job. It was exhausting and challenging but looking at the determined faces of the locals I was working with kept me going. Only 24 hours earlier, some of us on scene had been working together in green overalls. It was the same mindset, just different colours and tool kit.

This job reinforced the importance of the training and gear familiarisation we'd done. When it counted we could actually help. It also highlighted the importance of the Peer Support Program and the significant work they do.

Who have been your mentors in CFA?

My dad. I can offload and talk things through with him; about a job, a decision or an idea. After decades of experience dealing with fire (and me) he gets it. I also have strong mentors in FFMVic and Women and Firefighting Australasia who help me sustain a career in fire management, push me beyond my comfort zone and really listen.

What has been the highlight of your time in CFA?

There have been so many, but starting a conversation around mental health at a joint agency preseason barbecue was significant. Using CFA and FFMVic's mental health resources, and drawing on the little things that helped me maintain my mental health, I created a short presentation called How full is your water tank? This asked people to reflect on their capacity to respond to an incident based on all the other things going on in their lives that might push the water level to overflowing when they're under pressure at a call-out. It resonated with my colleagues after significant fires and other challenges faced in rural communities.

What lessons are you most keen to pass onto other members?

Respect the value of difference. Diverse perspectives and opinions can be more uncomfortable to deal with in the short-term as they challenge our own ideas and assumptions, but in the long run better quality decisions will be made because our ideas have been challenged and we've been forced to think deeper about them.

Don't let assumptions based on uniform colour, badges worn or not worn, or what someone may look like cloud your judgement of their value to the job at hand.

Whether you are leading a crew, teaching skills, engaging with community or participating in a meeting, pitch your ideas or instructions in the context of why you think that. This will help people buy into your end goal and it gives more transparency as to what you want to achieve.

INTERVIEW BY DUNCAN RUSSELL

NEW STATION FOR PORTARLINGTON





Portarlinton Fire Brigade officially opened its new state-of-the-art station in mid-June. The \$2.1 million facility was opened by Minister for Police and Emergency Services Lisa Neville after becoming operational earlier this year.

The new three-bay station, which replaced the 58-year-old former station, is on a new site nearer the town centre.

Portarlinton Captain Darren Nisbet said it was a huge win for the brigade. "We're in a growing area with a high number of retirees and holiday makers," he said. "The new station increases our ability to respond to incidents and provide the best service for our community."

"We have more than 40 members in the brigade now, which puts us in a great position to respond to any emergency.

"The new larger and modern station gives us a higher profile in a more central position in the town. Hopefully it will raise community awareness of the work we do and encourage new people to join us."

Rooms in the station can be used by brigade members for training or by other brigades and community groups. There's also a generator – a much-needed resource in the event of a power outage.

"This means we can operate business as usual with or without power," Darren said. "It will ensure our community gets the response it needs regardless of external factors."

The brigade is celebrating its 75th anniversary this year. "It's the best 75th birthday present a brigade could ask for.

"We look forward to serving and protecting our community from this new station for many years to come."

The icing on the cake? Darren was awarded a Life Member medal.

Below: Captain Darren Nisbet with wife Andrea after receiving a Life Member medal



PHOTOS: MICHAEL CHAMBER

THE ART OF FUNDRAISING



The popular ART4CFA fundraiser takes place each year during the Easter break in District 12, with more than 100 works of art on display.

ART4CFA came about seven years ago when a group of friends, who are also artists (pictured above) identified that they all had some sort of connection with CFA, either as members or because their partners were members.

Featured artist and organiser of the Hilldene Fire Brigade event, Lynda Robinson, enjoys seeing the community come out to support the event and their local CFA brigade.

“We thought it would be a good fundraising activity to have an art show to assist the smaller brigades in our area,” she said. “It’s seen as a community event and provides something for the public to attend during the Easter break.

“The idea was first broached with Trawool brigade, and was enthusiastically received, so that was where the first hugely successful event was held. The event has also previously been hosted by Tallarook, Glenaroua and Whiteheads Creek fire brigades.

“As well as local people, many members of the public passing through the area over the Easter break call in to look around.

“We encourage families to come out as there’s all sorts of activities kids can get involved in”.

The fundraising event invites a group of local artists to display their work for a small fee, which is used to pay for advertising and signage, and the artists donate a painting as a door prize or raffle prize.

Public entry to the exhibition is by gold coin donation, though there are often very generous donations – much more than a gold coin.

There are usually more than 100 works of art on display in various mediums including sculpture, and paintings using oil, watercolour, pastel and mixed media.

A popular aspect of the show is the Artists’ Challenge where each artist is given the same reference photo to work from and interpret in any way they desire.

A silent auction of a CFA-themed work by watercolourist Alan Brown is always a heated bidding competition.



Each year between \$2,000 and \$3,000 is raised by ART4CFA for the host brigade which is a combination of the entry fee, a percentage of artwork sales, silent auction and raffle ticket sales.

“ART4CFA is a joint effort between the artists and the brigade,” Lynda said.

“The host brigade is responsible for making an application to hold a fundraiser, in accordance with CFA Fundraising Guidelines. The concept revolves around attracting the public to come to a fire station to discover more about the role of CFA within the community, and perhaps consider joining the organisation.”

The brigade is also responsible for organising catering for the opening night, collection and setting up of the art stands (which are loaned by Yea Rotary Club), and ensuring the fire station is suitably prepared. The host brigade also puts out and retrieves the publicity signs and members attend the event to hand out CFA brochures and answer any questions from the public.

Next year Tallarook brigade will host ART4CFA.

STORY ERIN BULMER

LOCAL TRADITION TAKES ON A NEW LOOK



PHOTOS: COURTESY OF MACEDON FIRE BRIGADE

FUNDRAISING INITIATIVES FEATURE

For the past 51 years the Macedon CFA Flea Market has been an annual tradition for local residents and visitors to the area.

The flea market started in 1968 at the suggestion of the Ladies Auxiliary. The first flea market was held at the local service station and included an auction, bric-a-brac, recycled clothes, and furniture all donated by members of the local community.

The flea market has been a great success every year except in 1983 and 1984 because of the Ash Wednesday bushfires that swept through Macedon on 16 February 1983. During this tragic event Macedon Fire Station was destroyed along with all the donated items for the upcoming flea market.

It took time to re-establish the fire station, but by February 1985 it was up and running again and the flea market was back on.

"It's a key event in the local calendar and the major annual fundraiser for the brigade," Macedon brigade Captain Ross Luke said. "Over the 50 years we've raised more than \$340,000 which has contributed to five community-owned tankers, nine FCVs, a storage shed, breathing apparatus, extensions to the current and previous fire stations, kitchen renovations, radio equipment, hoses and various other types of firefighting equipment.

"The tradition and fundraiser has moved with the times and after a review last year, the market has taken on a new look and way of raising funds," Ross explained. "Instead of focusing on second-hand goods, which took a lot of time for brigade members to collect and store, the market now includes a goods and services auction and silent auction with anything from lawn mowing to car detailing services up for grabs, which the community loves and wants.

"We also have lots of food stalls, a plant sale and even bikes that have been reconditioned by an enthusiastic team headed up by one of our brigade members," Ross said.

"Our focus is always around making it a really fun, family friendly event. We have a kids zone play area with rides and a jumping castle, art and craft, and activities such as mini fire truck races.

"We really appreciate the time and enthusiasm from our members and the local businesses and community members that get behind the fundraiser.

"It's a tradition that I hope will continue for many years, not only to raise funds for the brigade but also an opportunity for the community to get together."

The annual Flea Market takes place every February and there's always something new and exciting to see.

Ross encourages everyone to check out the next one on Saturday 29 February 2020.

STORY GEORGINA HILL



A NOVEL FUNDRAISER

Some may call it a novel idea but Yarragon Fire Brigade is rewriting how regional brigades fundraise. The brigade has been kept busy this year sorting through thousands of books for its annual book fair at Yarragon Public hall.

Now in its 16th year the annual event is a major fundraiser for the local brigade and continues to grow every year. Yarragon brigade First Lieutenant and book fair organiser Michael O'Toole said the fundraiser has been an incredible source of income for the brigade.

"Each year it grows and grows. This year we raised \$32,000 and over the years it has allowed us to purchase a vehicle for the brigade, new equipment and even funded renovations at the station," Michael said.

"We've been running the book fair for 10 years now which has delivered well over \$100,000 allowing the brigade to get the newest equipment ensuring we're delivering the best service possible to the community."

In the past six years the brigade has been able to buy a new light tanker and equipment to respond to bush and house fires, renovated the meeting room, installed a new kitchen, and bought projectors, phones and iPads. Money raised this year will be put towards new automatic doors for the station.

Michael said the success of the book fair was because of the community. "All the books we collect throughout the year come from the general public and other organisations in the community.

"The book fair runs every second weekend of July. We ask for a gold coin donation and then sell books for between \$1 and \$2.

"We recently got the local primary school involved as well. They help to set up the fair and man the stalls in exchange for 15 per cent of the profits."

The book fair has also proven to be a major attraction for the town. "The community and shops love it," continued Michael. "This year more than 2,000 people came through the hall, and we even had people from interstate this year.

"It's a massive effort but the book fair has allowed us to do things at the brigade we wouldn't have been able to do otherwise."

"It's a shot in the arm for the local community," confirmed brigade Captain Ashley Smith.

"People come into town for the book fair and that supports our local businesses."

STORY HARRY ADAM



Left: Geoff Conway, former member of Yarragon brigade, before the sale
Above: Brigade members Annaleise Quinn and Kerry O'Toole with Captain Ashley Smith

PHOTOS: COURTESY OF WARRAGUL DROUIN GAZETTE

ENDURANCE HORSE RIDE IN DISTRICT 16

When Raglan Fire Brigade member Jeff Jarman suggested an endurance horse ride fundraising event, brigade Captain Bruce Tiley thought, “Why not? We’ve never done that before. We’ve tried selling raffle tickets”.

Fast forward a few months to the first day of spring, 45 kilometres east of Ararat, and Bruce and his small team of brigade members organised a successful fundraiser that netted the brigade more than they expected. “We thought we’d be doing well to make \$500,” Bruce said, “but we raised over \$2,000 which will go towards replacing our brigade-owned tanker.”

The money raised came from entrance fees and a sausage sizzle. “The riders didn’t expect any food so they were really pleased.”

Participants came from as far away as East Gippsland. Those doing the 80-kilometre ride set off at 6am and riders doing the 40-kilometre ride left at 7am. “Ten riders were still out on the course when we had a hailstorm at about 3pm,” Bruce said.

The day before the event the horses were checked by vets, and then checked again after half the ride to measure their heartbeat and to make sure the horses were fit to continue. “One horse lost a shoe so was vetted out.”

The horses were assessed again at the end of the ride, and a points system that took into account several factors was used to find the winner. “It’s not in the riders’ interests to go hell for leather as it will stuff up their horses.”

After the event’s success, Bruce is looking forward to next year. “I didn’t hear one complaint from the riders. They were absolutely wrapped. They loved the course we designed for them.

“We’re going bigger next year.”

STORY DUNCAN RUSSELL



Buy Captain Koala!

A hug from a CFA comfort bear can help a child take their mind off what’s going on around them in emergency situations.

After many years of dedicated service, our CFA comfort bear is going into well-earned retirement. Stepping up to take his place is an endearing character known to us all – CFA’s own Captain Koala.

Captain Koala is all dressed up in his CFA yellows and is keen to get out and help brigades working with kids affected by trauma.

Brigades, districts, regions and departments can buy him for \$10.50 each. Brigades can also buy Captain Koalas to use as a fundraising item with a recommended retail price of \$19.95.

Districts, regions and HQ departments can order him from the State Logistics Centre using the SAP code CKPLUSH.

Brigades should follow their usual process of submitting a brigade purchase order through their district using the product name Captain Koala Comfort Plush.

The State Logistics Centre hopes to fill all orders immediately but if demand exceeds supply there may be a number limit put on orders until a new batch of Captain Koalas arrives.



PHOTO: KEITH PAKENHAM AFSM

Ten-year labour of love



PHOTOS: COURTESY OF WARRNAMBOOL FIRE BRIGADE

A fire truck dating back to World War 1 has been lovingly restored to its former glory, thanks to a group of dedicated Warrnambool volunteers.

The 1941 K4 International pumper was originally stationed in Doveton, south east of Melbourne, before being bought by former Warrnambool Officer-in-Charge (OIC), Henry Barton, and a mate with the aim of restoring it.

But after Henry passed away, the pumper sat rusting in a field in Melbourne until 2003.

It was when the station's current OIC Paul Marshall and volunteer firefighter Adrienne Anson raised the prospect of restoring an old truck at a brigade meeting, that the old pumper was brought up. Alongside a handful of members, they travelled to Melbourne to inspect it.

"It was looking in a pretty sad way," Paul said.

"There were various bits and pieces missing and the engine had been stripped, but it had potential."

With the help of Melbourne Fire Museum, the pumper was transported to Warrnambool.

Restoring an almost 80-year-old truck was never going to be easy, but fortune was smiling on Warrnambool brigade.

"One of the guys actually came across another identical truck sitting in a farmer's paddock up here, and the only parts that were missing were the parts we found on that truck," Paul said.

"The farmer ended up donating it as it was just sitting there rusting in his paddock."

A group of 12 dedicated volunteers took a decade to restore the pumper.

"It was stripped down to the bare chassis and rebuilt from scratch," Adrienne Anson said. "We had some pretty talented guys working on the engine and the bodywork."

"It's so great to see it up and running."

But she said it was sad that one of the station's young volunteers passed away before it was completed.

"Matthew O'Neill had been a volunteer for the

better part of a decade, starting as a Junior brigade member and then a firefighter."

Adrienne said the pumper was used to honour the 26-year-old's life. "The guys formed a guard of honour when his casket was carried and placed him on the truck before he was driven away."

The pumper will be housed at the Warrnambool Fire Brigade after some more minor works to complete the project, and kept as a showpiece of the dedication and commitment of all Warrnambool firefighters.

STORY SIMON GALLETTA



125 years serving the community



PHOTO: PIXEL 360

Dandenong Fire Brigade celebrated its 125th anniversary in mid-August. Formed in December 1893 as a result of mounting public and media pressure for a fire brigade to be formed in Dandenong, it has grown to be the largest CFA brigade in the state.

Dandenong First Lieutenant Wayne Charlton said a lot has changed since those days.

“At this first meeting roughly 20 young men enrolled in the brigade. At that time they were charged five shillings to cover the cost of a cat and belt, and by February 1894 the brigade had grown to 80 members,” Wayne said.

“The brigade’s first appliance was actually bought from MFB; it was a hose reel on two wheels.

“In the early days members were alerted to fire by a 20-foot high bell tower erected at the station, and they would rush to the station when they heard it.

“The brigade only received its first motorised truck in 1926 which really was the first step in turning the brigade into what it is today. The brigade received its first career firefighters

in 1953, becoming one of the first integrated stations across the state.”

With at least seven trucks, two support vehicles, almost 70 operational staff and more than 30 volunteers the brigade responds to close to 2,600 incidents a year.

Brigade Secretary Mel Chappel said while the brigade has changed a lot, it has consistently gone from strength to strength.

“When I first got involved in 1983 we were still in the station that was built in 1910,” Mel said. “We now have a massive station built only four years ago. I remember in the ‘80s there were no high-rises, no industrial areas and a lot of farmland. It has changed a lot.

“Now, we’re responding to more road accidents than ever. We are doing rope rescues as well as emergency medical response. But the biggest change is how multicultural our community and the brigade has become. We now run programs and produce materials in different languages and are constantly looking for new ways to engage all the different cultures in the Dandenong area.”

STORY HARRY ADAM

Glenaladale’s road to recovery

Glenaladale Fire Brigade members celebrated the official opening of their new station extension as well as the delivery of a new ultralight tanker at the beginning of August with community members and District 11 Operations Manager Daryll Hunter.

Captain Rick O’Haire said it was time for an upgrade after the community had been devastated by fires in early 2014.

“We’ve actually had the ultralight tanker for some time now after it became apparent we needed a more nimble appliance, and the new tanker has seen us meet our response time targets 100 per cent of the time.

“The real celebration tonight is about the extension of the station which can now properly house the tanker, and a celebration of all the work since 2014 to get us to this point,” he said.

Since 2014 the brigade has received funding of \$116,000 for the tanker through a VESEP grant and \$24,000 for the station extension thanks to a grant from Emergency Management Victoria.

“The new station has space for all our vehicles,



a communal area for the brigade as well as dedicated storage.

“This means we can respond faster to incidents and deliver the best possible service to our community.”

The official opening also saw National Medals and service awards handed out.

“Collectively we recognised 520 years of service to CFA and the Glenaladale community,” Rick said.

“It was a great night and a culmination of many years of work from a lot of people.”

STORY HARRY ADAM





CFA brigades across the state are once again encouraged to open their doors to the community between September and December and participate in CFA's 2019 Open Day program.

Open days are a great opportunity for brigades to engage with their local community with a focus on preparing for the upcoming summer fire season, while also showing Victorians how to protect lives and property throughout the year.

In 2018, 317 brigades and 3,470 members participated in the Open Day program, reaching more than 39,000 Victorian community members.

Chief Executive Officer/Chief Officer Steve Warrington said CFA open days were a way for the public and CFA as a whole to recognise the important work being done by CFA members.

"People who engage with emergency services are more likely to respond positively and safely to warnings and directions during times of emergency," Steve said. "Developing trust and familiarity between the community and emergency services is a crucial step in ensuring safety."

Brigades are encouraged to tailor their open day event so it works best for their own brigade and community needs and risks.

For promotional materials and event planning tools visit cfa.vic.gov.au/templatetoolkit





Photos from 2018 open days:

- 1 Clyde Fire Brigade
- 2 Heskett-Kerrie Fire Brigade
- 3 Montrose Fire Brigade
- 4 Sunbury Fire Brigade
- 5 Gisborne Fire Brigade
- 6 Epping Fire Brigade
- 7 Truganina Fire Brigade
- 8 Wallan Fire Brigade
- 9 Truganina Fire Brigade



**Register your brigade
open day now at
cfa.vic.gov.au/whatson**

Hopetoun celebrates new station

Hopetoun Fire Brigade's new \$1.28 million station was officially opened at the end of June 2019 by former CFA Board Member Lynda Hamilton in front of more than 80 brigade members, family, friends and members of the community.

Also present were Assistant Chief Officer Gavin Thompson (who gave out service awards along with Lynda), and Acting Operations Manager Robin McNally who was the MC for the event.

The new station replaces the brigade's 43-year-old station and includes three bays, a multi-purpose room and kitchen, office space, washing facilities, turnout rooms, workshop, a breathing apparatus maintenance room and car park.

The station is designed with the future in mind, enabling brigade volunteers to house the newer, larger vehicles that are being rolled out to brigades. It currently houses a 3.2D tanker, a 3.4D tanker and an FCV. During harvest time, it also houses a 9000-litre ultra heavy tanker.

As well as being a central base for the brigade, the new station functions as the Southern Mallee Group's headquarters and local command facility, and has all the requirements to run level 1 and 2 incidents, as well as provide support for larger ones.



It will also become a hub for local organisations with the new meeting room and kitchen available for use for meetings and events, strengthening the brigade's relationship with its community.

What we can use the new station for is above and beyond what the brigade could previously achieve," Captain Danny McGee said.

"The communications and data set-up, phone set-up and the ability to run a level 1 or level 2 incident from Hopetoun means we've jumped in technology.

"Everything has really moved ahead in the last 12 months."

STORY DUNCAN RUSSELL



Trio of trucks for Truganina

Three new vehicles worth more than \$1 million are now operating out of Truganina Fire Brigade.

The heavy tanker, medium pumper and field command vehicle (FCV) will boost response capabilities around the fast-growing area. "A lot of our grass fires are fast moving and can impact new home developments that often border farming and grassland," District 14 Commander Andy Waterson said.

Andy said it's particularly tough during the fire season. "What these new vehicles will do is give firefighters greater capability to fight those fires within their brigade and surrounding areas."

He said the medium pumper will be used predominantly for fighting urban and structure fires, with the heavy tanker battling grassfires and bushfires. Meanwhile, he said the FCV will allow for commanders to better manage crews, direct operations, and also provide support for staging area management.

"These vehicles are cutting-edge technology, and there's been a lot of positive feedback from the crews here," Andy said.

"It shows the great work being done by fleet, and operations are paying off with these vehicles.

"It's a big win for Truganina brigade, the Mount Cottrell Group, and District 14."

STORY SIMON GALLETTA



Yackandandah goes solar



Totally Renewable Yackandandah (TRY) is a wholly volunteer-run community energy group. Formed in 2014, its goal is to power the whole town with 100 per cent renewable energy and achieve energy sovereignty (being able to control and regulate their own energy) by 2022.

Yackandandah Fire Brigade was formed in 1916, and currently has around 45 qualified firefighters dedicated to protecting about 3,000 people in Yackandandah township and its surrounds. The brigade became involved in the project in 2017, when there was an analysis of its energy use, and renewable energy opportunities were considered.

The TRY team secured a grant to fund the installation of a new solar energy system at the station. The venture became jointly funded by the Victorian Government under the Renewable Communities Program, Totally Renewable Yackandandah, the Into Our Hands Foundation (which was set up after the 2009 fires) and local community and business partners.

The TRY group was formed after a community energy forum in Yackandandah, organised by the Indigo Shire Council. Project Manager Matthew Charles-Jones has been a part of the TRY project since it started.

"It's very exciting to see CFA taking up opportunities to save money with renewable energy and embrace the critically important challenge of climate change," Matthew said.

"The evidence is very clear. There's a powerful and disruptive link between worsening fire behaviour, more extreme weather events and increasing concentrations of carbon dioxide in the atmosphere. Shifting to renewable energy is a first vital and achievable step in the long journey to carbon emissions reduction."

At Yackandandah Fire Station, changes started with the installation of an energy-efficient split system air-conditioner and LED lighting. In 2018 the project continued by replacing the external, inefficient electric hot water system with a reliable bottled gas instantaneous unit.

In June 2019 a battery was installed at the station to reduce the export of solar electricity to the grid – storing it provides a backup supply for essential equipment if there's a power outage. This supply can also be used on site to carry out activities when it's dark. This further reduces the overall demand on the energy grid.

Yackandandah Captain Yves Quaglio (pictured above left with Lieutenant Margrit Beemster) believes the brigade's shift to a solar and battery system is a strong reflection of the changing community sentiment towards energy.

"The battery system provides the additional confidence of a resilient power supply during emergency events," Yves said. "At the same time we expect the energy bill for Yackandandah brigade to be zero or even negative across the year."

Following the replacement of the hot water system and installation of the solar energy system, electricity use between February and May 2019 has dropped by 48 per cent compared with the same months in 2018. Figures are yet to come in for the change in costs since the battery was installed.

"Yackandandah is a great little town with a huge creative spirit. This innovation is another manifestation of that spirit and is a strong reflection of the care that drives CFA volunteers to dedicate time, money and effort to being CFA members," Yves said.

"The project is testament to the things which become possible when we work together – government, corporates, philanthropy, business and a dedicated community."

As at the start of 2019, 16 CFA fire stations had solar electricity generating systems and many more brigades around the state are planning installations. CFA headquarters in Burwood also has solar panels.

STORY DAISY CLELAND

Burn to encourage native growth



Malmsbury Fire Brigade is working with its community to restore a culturally-significant community space. Brigade members helped with an ecological burn at Malmsbury Common in mid-May in conjunction with Macedon Ranges Shire Council and the Malmsbury Common Community Working Group, with the aim of stimulating the growth of its native species.

The Common is a highly-valued conservation reserve with significant native grasslands, wetlands and stream bank vegetation. It's also home to a diverse range of flora and fauna and supports important Aboriginal and European cultural heritage values.

A master plan for the site aims to protect and enhance its natural environmental and cultural values while providing opportunities to increase its use by community members.

The burn aims to change the conditions of the site, reduce biomass and interrupt grass seed production, stimulate the growth of native species, and change the composition of vegetation to more closely resemble the natural conditions of the area.

"Agricultural grasses have come into this area and they can have quite a negative impact," said Martin Roberts from Macedon Ranges Shire Council. "We want to change the nutrient and moisture levels in the soil."

Malmsbury brigade Lieutenant Darren Burren also made the point that the burn gives the community protection for next summer, because it introduces a fire break against fires from the north.

The process to rehabilitate the site to how it may have been 200 years ago is expected to take a number of years.

STORY SHAUNNAGH O'LOUGHLIN



PHOTOS: BRIAN WILSON



Above: The Lady Don Manual Fire Pumper was a horse-drawn pumper built in 1851. It was first placed in service in Talbot, Victoria, and was named for Lady Don who donated it in appreciation of a successful theatrical tour in the area.

CFA's historic firefighting vehicles



Left: The Austin Type 2.2 tanker had a 1,800-litre water tank and a petrol pump at the rear. It was the typical CFA bush firefighting unit and was seen across Victoria until phased out in the late 1980s.



Left: The hydraulic platform was designed and built in Australia on an International truck chassis. It had an articulated steel boom mounted on a rotating turntable. The boom could reach heights of 22 metres and could deliver 3,600 litres of water per minute.

Right: The 6.87-litre diesel Hino Type 2 pumper included a 1,400-litre water tank and 200-litre foam tank. Based on a FF172 Hino chassis, the pumper was fitted with crew cabs when manufactured by CFA engineers in Ballarat.



Right: The 3000-litre Hino 3.4D tanker was designed in 1986 on a GT175 4X4 chassis and included five-speed manual gearbox and power-assisted hydraulic brakes. The 3.4D had a built-in roll over protection structure on the rear deck.



Right: The RLHC series Bedford Type 4.4 tanker was popular in the 1960s. It carried 3,600 litres of water and included a deck-mounted monitor and a VW Godiva pump at the rear.



Earlier this year former CFA firefighter Bill Jones donated a series of CFA postcards to Harrietville Fire Brigade when he retired as a volunteer.

The postcards, initially released in the 1970s to raise awareness of fire safety in the community, show CFA vehicles across the years, highlighting just how far they have progressed. If you recognise them or know anything about the artist Emmerson, we'd love to find out more. Please email duncan.russell@cfa.vic.gov.au.

STORY SHAUNNAGH O'LOUGHLIN AND KEITH PAKENHAM AFSM

Emergency expo at mosque

“Lights, sirens, water on”. The Indian and Fijian communities of Hallam heard this often at the beginning of July 2019 when about 1,000 families attended the AFP South East Emergency Expo.

The Emergency Expo, which was held in the Hallam Mosque car park, hosted emergency services from AFP, AFP Forensics, Victoria Police (displaying historic police cars), Australian Defence Force, SES, CFA and MFB.

CFA Hallam firefighters, Hallam Juniors and two members from Dandenong Fire Brigade put on quite a show with a tanker, ultralight and the ladder platform, with community and emergency members mesmerised by the vehicles.

As well as showing off their tanker and spraying water from the ultralight, Hallam firefighters passed on safety information to the community about Triple Zero (000), why sirens are used, and the importance of fire safety.

“It was a lot of fun. The community knows who we are now, what we do and they are very supportive of us,” Third Lieutenant and Community Safety Officer Brad Bennet said.

“They were very interested in all the appliances we brought down today and the Juniors made a few new friends who will hopefully join them.

“Overall, we learned a lot from the Indian/Fijian community as well. We had a tour of the mosque and learned a little about their faith and culture. Learning is a two-way street and we are grateful to have been invited to be part of this day.”

STORY NADA EL-MASRI



PHOTOS: NADA EL-MASRI

Ray's 75 years of service

Ray Larcombe was just 13 years old when he joined Rochester Fire Brigade in 1942. “He joined after a firefighter met with the boys at one of his scout meetings,” his wife Gladys recalled. Three-quarters of a century later and Ray has been awarded his 75-year service medal.

“He was very proud to receive it. His service from 1942 to 1944 was never recognised [prior to the formation of CFA]. So yes, very proud to receive his 75-year medal,” Gladys said.

Ray was still heading out to fires up until a few years ago, taking sandwiches, drinks and supplies to firefighters on the frontline.

And while the 93-year-old is starting to slow down a little, his wife said he still likes to stay involved where he can.

“He’s still very active, just not operational. He always goes along to the meetings, and he keeps in touch with everyone. He’s always been very dedicated to the community.”

She said when he was a packing boy at Parson’s grocery store, or later as a manager at Northern Timber, neither employer docked his pay when he was called to an emergency.

“He was just so proud to go off and do his duty,” she said.

“I remember when he was younger, he lived in town and I lived on a farm. He would go off to meetings in town, but always end up riding his motorbike out to the farm. But I’ve had to ban him from riding it these days. I tell him ‘if you fell over, you’d never get it back up’.”



STORY SIMON GALLETTA

Joint training with ESSO

On Thursday 15 August CFA's Longford Fire Brigade and Sale Fire Brigade took part in a joint training exercise with Esso Australia. The training, held at Fire & Emergency Training Centre in Longford and run by ERGT, is the first time Esso have invited CFA to train collaboratively.

With three participants from Longford and three from Sale, the seven-hour training day included hot training using LPG, kerosene, crude oil and methane. Exercises included preparing for gas leaks, fuelling station leaks and helicopter crashes, as well as practising firefighting different types of Class B fires.

Cheryl Walker, 2nd Lieutenant and Community Safety Coordinator at Longford Fire Brigade, was one of two women who took part in the training day.

The training facility, Cheryl described as a large-scale version of Sale's training grounds, allowed Longford to train with reticulated water – which is something different for this crew.

"It was great to do some training with the Esso firefighters, as it gives us an idea of what we could expect if we turn out to an incident at the Esso Longford plant," Cheryl said.

"If there are incidents where we respond together, we're able to understand their training language and how we can work together to achieve a common goal."

STORY DAISY CLELAND



Agencies work as one

Several CFA brigades, SES, St John Ambulance and Victoria Police met at Kiewa Fire Station in winter for a car accident training night. The scenario was a single car into a power pole with two people trapped and power lines down.

To add to the crew's workload, one person was missing from the vehicle and a stream of oil and coolant was making its way to the Kiewa River.

Before the live scenario all parties met to share knowledge including the importance of protecting crime scenes and how to support members after traumatic incidents. A CFA chaplain attended to talk about the services CFA people can access to support their wellbeing.

CFA crews and Victoria Police were first on scene, reassuring the trapped passengers and advising them to remain in the vehicle because of the power line hazard. Shortly after, SES and St John Ambulance arrived.

When power had been disconnected, SES crews went straight to work assessing the scene and stabilising the vehicle, assisted by St John.

CFA crews carried out various tasks including scene preservation, removing occupants from the car, ensuring the river was protected from the oil and coolant leaks, and conducting a land search with SES using thermal imaging cameras to find the missing person.

The scenario gave local police the opportunity to stop passing

motorists to remind them about the 40km/hour speed limit when driving past emergency services vehicles with flashing lights.

While the two passengers in the car were transported to hospital with leg and back injuries, the missing person was located deceased.

This allowed brigades to focus on how they would address member welfare at an active incident as well as helped them learn more about protecting evidence for crash investigators.

Kiewa captain Aaron Wallace said all agencies worked together for a great outcome.

"We achieved the goals we set out to do in the exercise and most importantly we all worked as one team. It's a better exercise when all services come together," he said.

"This is the fourth year we've run a multi-agency training exercise. It's become really important in building relationships, sharing information and equipment, and learning how to work cohesively, so that when we get to the real thing we're as prepared as we can be."

Taking part were Kiewa, Bonegilla and Kergunyah brigades, CFA District 24 Commander Mark Owens, Tallangatta SES, Tangambalanga Police, and St John Ambulance Wodonga. The car used in the scenario was donated by Indigo Shire Council.

STORY SHAUNNAGH O'LOUGHLIN





PHOTO: AARON WALLACE

JUNIORS GROW INTO SENIORS AT KIEWA BRIGADE

Kiewa Fire Brigade Captain Aaron Wallace understands the importance of recruiting youngsters, and that's why the senior brigade members have a close relationship with their Junior brigade.

"This close relationship means the youngsters can train with older members as they reach the end of their junior membership," he said, "which encourages juniors to transition into the seniors, giving us a good flow of young members."

When juniors are almost 16 years old they attend training with the senior brigade, to introduce

them to the equipment, the station and older members. They begin their Minimal Skills training to be firefighters as soon as they become senior members, and because the brigade has already introduced them to senior training, they complete this fast and efficiently.

Three juniors who joined the brigade when they were 11 years old – Jack Nicholls, Abbey Damm and Branden Wallace – recently followed in their family's footsteps by joining the senior brigade.

16-year-old Branden has a passion for his brigade, which perhaps isn't surprising given

that his dad is the captain and his mum and sister are also brigade member.

"I completed my Minimum Skills in mid-June and I'm now looking forward to helping the community," Branden said. "I did the training with Jack and Abbey. We gave each other support and we're pretty good mates.

"Doing some training with seniors before I was 16 gave me a good idea of what it was all about," he said.

STORY DUNCAN RUSSELL

Upwey Juniors' virtual experience



PHOTOS: KARRA MCLEOD

Every now and then, the leaders of Upwey Fire Brigade's Juniors program like to introduce something different to engage their Juniors. In the past, they've set up a simulated breathing apparatus scenario and visited neighbouring emergency services.

Recently staff from Computer Simulations brought their virtual reality technology to the station to teach the Juniors about fire hazards in the home and how to identify them.

"I loved the experience! It was fun and immersive teleporting around the house to inspect it for fire safety hazards," Isabelle Smith said. "The ladder lift was kind of scary but there was so much adrenaline rushing through my veins as I dared to step off the edge; I needed to remind myself it wasn't real.

"It would work really well as a teaching medium because there are infinite possibilities of what scenarios you can make for VR. I think it was one of the best and most exciting things I've ever done."

It was fantastic to be able to deliver material to the Juniors in a different format, rather than just showing them photos and being talked at. They loved the opportunity to learn within the computer environment, and they walked away with a better understanding of household safety.

STORY KARRA MCLEOD

Attracting new juniors

Glenlyon Fire Brigade was looking for a way to engage with brigade members and their families, and attract new kids to bring new life to the station.

When we first took it to a brigade meeting, it was great to hear how many of our long-serving members had fantastic memories of being Juniors themselves.

Advertising and recruiting was easy. We used the power of social media to pass on messages to kids we knew and who we thought might be keen to join the brigade. We put up posters around the town and dropped into our local schools with brochures.

At our official launch it was fantastic to see 11 new youngsters turn up. We played a getting-to-know-you game, about ourselves and then about the fire trucks. Then we rolled out some hoses and the kids had fun forming them into the words 'CFA Juniors'. They really are a fantastic group of kids. They are so eager to learn and the fun just flows. We've been supported with resources and been given ideas for Junior sessions. We now have 14 members.

We're really pleased that we're providing kids from our local area with fun, friendship and life skills and our hope for the future is to continue doing so. Our Juniors have learned so many things that help in their everyday lives. A few have talked about going home from sessions and talking to their families about smoke alarms and evacuation plans. One enthusiastic Junior was even keen to put together an evacuation grab box.

We know we're making a difference and will continue to do so.

STORY JESSICA NEWTON



Through the ages – Sale



- 1 New motor pump demo, 1931
- 2 Opening of new fire station, Raymond Street, Sale, 1996.
- 3 Bushfire strike teams in Sale, 2006
- 4 Sale Fire Brigade, 1886
- 5 Firefighters and Dodge fire truck, 1928.
- 6 Fire Station and Ambulance, 1930s





- 7 Captain JH Cartledge, 1908
- 8 Current Sale Fire Station
- 9 Members marching from old York St station to new Raymond St station, 1996
- 10 Esso incident with Sale pumper, 1998
- 11 Esso incident, 1998
- 12 Fire at greyhound track, 2003
- 13 125-year celebrations
- 14 York Street station



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