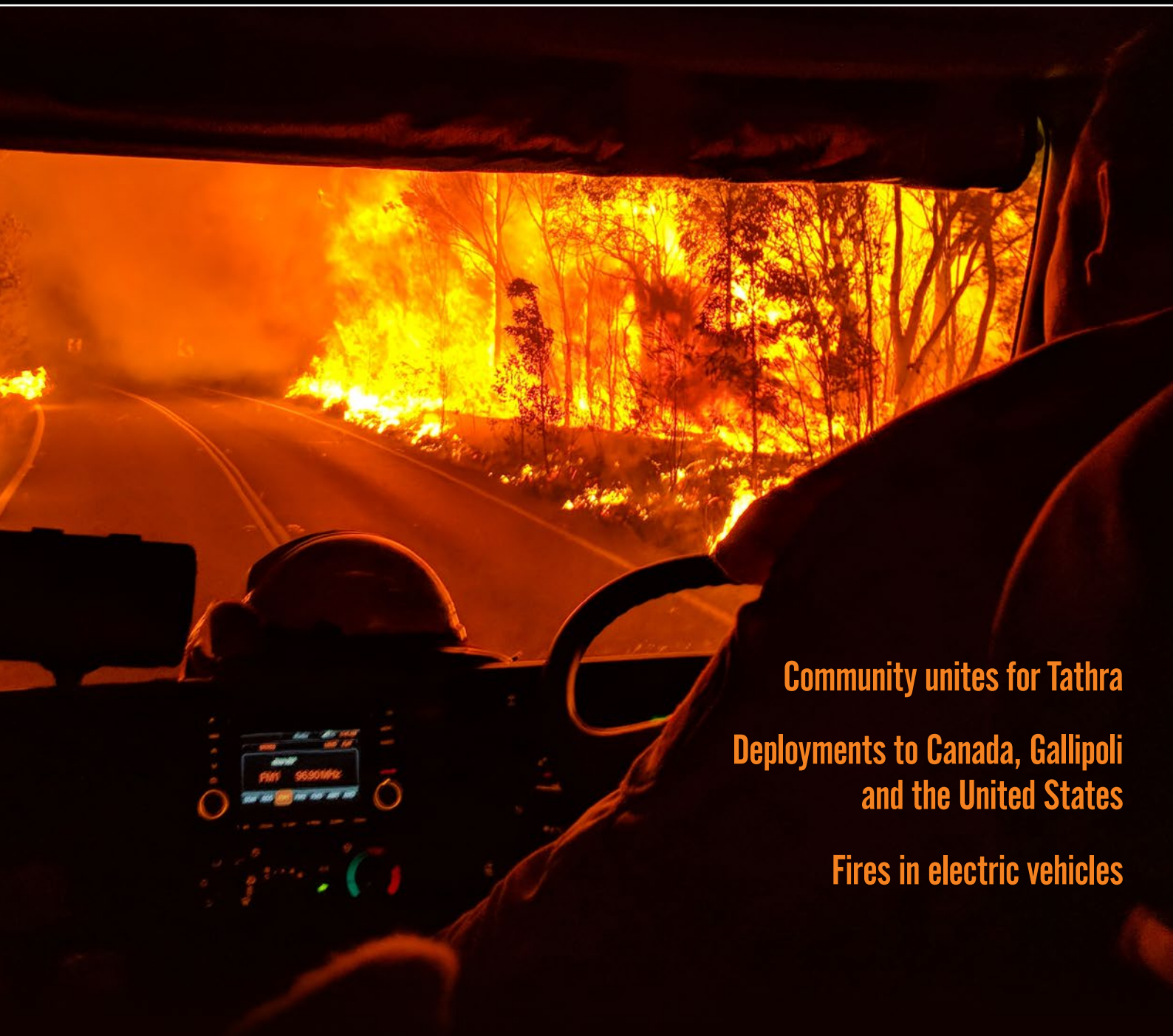


LIFT-OUT: GUIDE TO THE NEW NSW RFS CONSTITUTION

VOLUME 40 NO 1/2018

BUSH FIREbulletin

THE JOURNAL OF THE NSW RURAL FIRE SERVICE



Community unites for Tathra

Deployments to Canada, Gallipoli
and the United States

Fires in electric vehicles

A long hot summer, a bone dry winter



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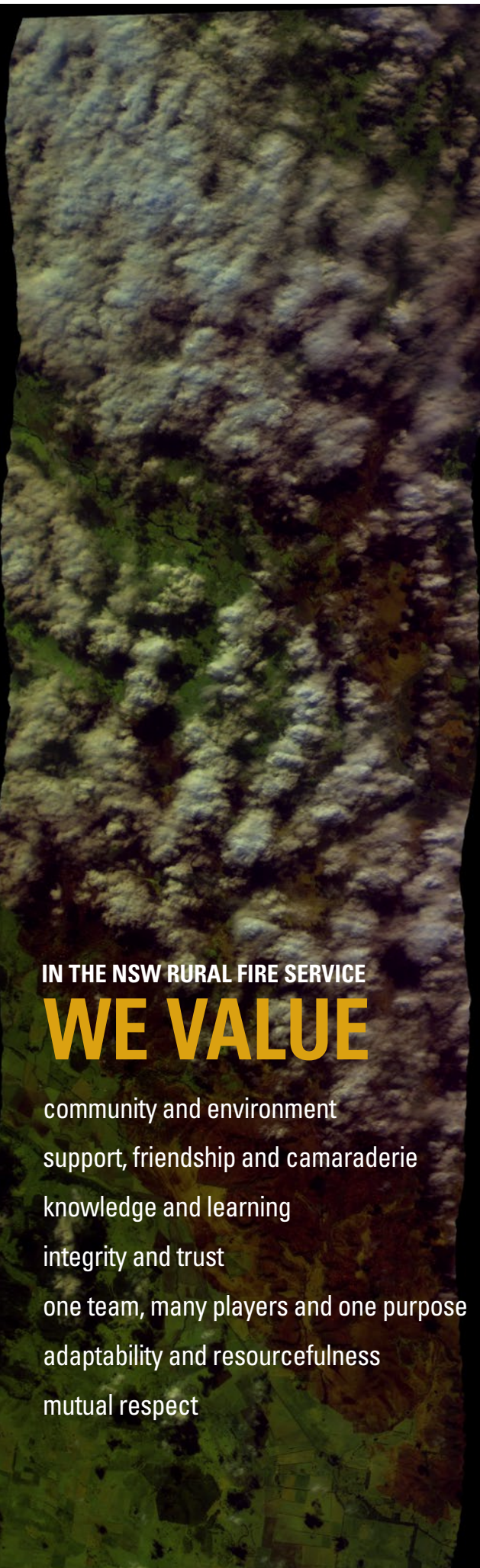
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IN THE NSW RURAL FIRE SERVICE
WE VALUE

community and environment
support, friendship and camaraderie
knowledge and learning
integrity and trust
one team, many players and one purpose
adaptability and resourcefulness
mutual respect

Foreword



There has been considerable attention recently on challenging and destructive bush fires such as those which affected communities like Tathra and around south-western Sydney. These fires were difficult to contain, and were particularly challenging given how late in the season they occurred.

It's worth remembering though that these events across March and April, were just two of more than 14,000 bush and grass fires our members have dealt with across the 2017/18 season.

The state's north saw fire activity in August and September, and while there was somewhat of a reprieve during October and November, serious fires were experienced in areas such as the Hunter, Northern Tablelands and western Sydney by Christmas.

In the early parts of this year, the challenge continued thanks to lightning causing around 500 new fires across the ranges.

The late conclusion to the fire season – which saw a total of 22 days of total fire ban and more than 70 homes destroyed – shows how we, just like the community, can't be complacent about the threat of fire.

While the loss of property is a tragedy for those affected, it's worth reflecting once again on a very important statistic – that is, there was no loss of human life.

It's important to recognise that this includes no loss of firefighters. I'm always reminded of the danger that our people face, never more so than when I attended the recent National Volunteer Memorial service held in Canberra on 1 May. A new memorial wall was unveiled at the ceremony, featuring the names of more than 70 NSW RFS volunteers who have lost their lives in the line of duty. You can read more about the memorial in this edition of the Bulletin.

You will also find in this issue a feature on the new Brigade Constitution, which is now in effect for all brigades. This is a big step forward for the Service and, most critically, it provides a greater level of certainty and protection for our members. The Constitution allows brigades to maintain their identity, and create brigade rules and standing orders, to ensure the brigade operates effectively and within the requirements of today's legislative environment.

As we send off our members to assist with the devastating fires in the United States and Canada this month, we can look back with pride at the unprecedented deployment of front-line firefighters to British Columbia in 2017. The article in this issue highlights the fascinating differences in firefighting in these locations compared with Australia.

The 2018/19 season is starting early. Whatever role you perform in your brigade, stay safe and thank you all for your continued service with the NSW RFS.

Regards,

Shane Fitzsimmons AFSM
NSW RFS Commissioner



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@RFSCommissioner

Reduced traffic speed trial to keep members safe



From September this year there will be a twelve-month trial of a speed limit around emergency vehicles on NSW roads. The Minister for Emergency Services, Troy Grant, announced in April that the 40 km/h reduced speed limit will apply on roads when emergency services vehicles have their red and blue lights flashing at emergency incidents.

The NSW Rural Fire Service Association has been actively pursuing this initiative and the NSW RFS has worked with other emergency services and the NSW government to develop this initiative. The trial follows similar laws that have been introduced in Victoria, Western Australia and South Australia. The reduced speed limit is designed to ensure the safety of NSW RFS members and other emergency services personnel who are responding to emergencies.

An operational brief released on 7 June contains further details and can be viewed on MyRFS.

New Research Hub to focus on bush fire risk



The University of Wollongong will house a new \$4 million Bushfire Risk Management Research Hub, which is part of a five-year research partnership between the university and the Office of Environment and Heritage.

Minister for Emergency Services, Troy Grant, welcomed the partnership and the Hub's specialised focus on NSW bush fires.

"This Hub brings together academic expertise and practical knowledge from our firefighters to develop ways we can mitigate bush fires in the future," Mr Grant said.

"What works for one area may not work for another, so it's great that this research will look at local solutions across the state," Mr Grant said.

Black Hawks to be used by NSW RFS



The NSW RFS will take delivery of two Black Hawk helicopters for use during emergency operations.

The Commonwealth Government has agreed to the transfer of the aircraft once they are withdrawn from military service. The aircraft will be transferred from the Defence Department to the NSW Government, through the NSW RFS.

Once refurbished, they'll be used in a range of emergency operations including bush fires, floods and other disasters. They will also be used for RAFT and RART operations.

The NSW Government confirmed the transfer as part of the State Budget in June, with \$6.5 million allocated to converting the aircraft into firefighting resources.

The Black Hawks have a cruising speed of 270 km/h and are expected to be operational for the NSW RFS over the next two years.

The task profile of these aircraft will be consistent with the current primary and secondary roles of RFS owned helitak aircraft.

Rotary Emergency Services Community Awards



The 2018 Rotary Districts & Clubs of NSW and ACT Emergency Services Community Awards were announced on 1 June. These awards recognise and acknowledge the selfless community service of NSW and ACT emergency service personnel.

Commissioner Fitzsimmons said this is “a wonderful way to celebrate and recognise emergency services personnel, both salaried and volunteer, who have been nominated by their communities and peers in recognition of extraordinary service”.

NSW RFS Inspector Glenn Byrnes was awarded Overall Officer of the Year Serving in a Paid Capacity. Inspector Byrnes of the Lower Hunter

Zone has had a huge portfolio of roles with the NSW RFS for over 30 years. NSW RFS member Lachland Sutherland proudly received the inaugural Dorothy Hennessy OAM Emergency Services Youth Scholarship Award.

Congratulations to all nominees for their extraordinary work. There were four NSW RFS finalists, including long-serving Kearsley Rural Fire Service Captain, Les Goldie, Donald Anderson, who holds multiple roles in the Central Coast Region, and Deputy Captain of Engadine Brigade, Deborah Sharp, who has been an inspiration to many and filled multiple roles.

National Emergency Services Memorial



The new Emergency Services Memorial Wall was unveiled at the National Memorial Service in May. Held at the Lake Burley Griffin National Emergency Services Memorial in Canberra, the memorial service honours the commitment and ultimate sacrifice of fire and emergency service personnel who have died in the line of duty.

The wall records the names of over 400 men and women who have lost their lives in protecting their communities. There are 74 NSW RFS members whose names are memorialised on the wall.

Deployment to United States and Canada, August 2018



The NSW RFS has joined interstate colleagues on a six-week deployment to assist firefighters in the United States. California and the west coast have been most affected with six lives lost and over 500 properties destroyed.

The Australasian National Resource Sharing Centre organised the deployment of 188 Australian and New Zealand personnel. The contingent included divisional commanders, heavy plant supervisors, air base managers, safety officers and sector leaders, who are assisting thousands of US firefighters.

The Canadian Interagency Forest Fire Centre has also requested assistance from Australian fire fighters who will join those already deployed from Mexico and the United States. Canada is experiencing significant fire activity with six priority fires burning in Ontario at the time of the request.

A long, drawn out

Bush fires challenged Rural Fire Brigades throughout the state well into the autumn of 2018.

The 2017/18 season was a long drawn out season commencing in August and still going in April. Some of our members were deployed to Canada in July, then fires started in the north of the state in August and September.

There was somewhat of a reprieve in late October and November, but by Christmas Day in the Hunter, Northern tablelands and western Sydney the fires were numerous and they didn't stop, especially in January and February. In late January/early February, 500 plus fires on the ranges started with lightning.

In November between 20–30 fires started in the Mid Murray zone due to a large storm that passed through the region. They were all relatively small, but forty firefighters chased lightning strikes over an eleven-hour period.

Firefighters continued work right up to Christmas with a fire burning near Mulgoa on 23 December. Crews put in



hard work to contain this fire by Christmas Day assisted by the VLAT Nancy Bird. On Christmas Eve there were still 37 fires burning across the state with 17 not contained and 350 crew working across the fire grounds.

The new year brought continued low humidity and hot temperatures with 40 plus degrees over the first weekend of 2018. TOBANs declared for Sydney and Greater Hunter areas continued on Monday 8

as the warm, dry and windy conditions persisted. Storm activity with dry lightning started dozens of fires across NSW through the week, with some light rain eventually assisting firefighting efforts.

season



2017/18 BUSH FIRE SEASON ACTIVITY

14,467	bush and grass fires
265,848	total hectares burnt
23	total fire ban days
12	Emergency Warnings
74	homes destroyed
63	homes damaged
1000's	homes saved
0	lives lost

A Harvest Safety Alert was issued Friday 12 January for the Mid Murray Zone, before another warm weekend continued. The Masonite Road, Tomago fire started on Saturday 13 January. This fire

was one of two during January that went to Emergency Warning (EW), with concern for communities to the north of Newcastle Airport, including Campvale. This fire went back to advice overnight however

under strong southerly winds spotted over and went back to EW Sunday afternoon. Crews were assisted at this fire by aircraft including the VLAT. This weekend also saw the start of the TJ's fire which

Main image: 14 April 2018 Moorebank Avenue fire attended by the Galston Rural Fire Brigade. Photo: David Aslin. **Lower left:** The Bannaby Road fire near Taralga in early January. Photo Ned Dawson. **Right:** Sir Bertram Stephens Drive, Royal National Park. Photo: Sharon Quandt.

started in rugged inaccessible terrain in the Putty State Forest and which burned approximately 4800 hectares.

As well as bush and grass fires, our members responded to other emergencies, such as the structure fire in Harrington which was contained before it spread to neighbouring businesses. NSW RFS and FRNSW attended a truck crash on the M1 motorway at Cooranbong near Morriset on 15 January. One of the vehicles caught fire and spread to nearby bushland.



Over the final week of January, storm activity and lightning was responsible for dozens of new ignitions, particularly around the Blue Mountains/Wollemi National Parks, the Greater Hunter, Mudgee and Lithgow areas.

The M1 was closed for some time, affecting travel for motorists. This fire saw a unique and complex response with a FRNSW CAFS unit supported by NSW RFS bulk water tankers attacking the truck fire while the aircrew supported ground crews to attack the bush fire.

The Dipper Rd, Dandry fire in the Pilliga kicked off around Thursday 18 January. Fire fighters worked to protect isolated rural properties as the Newell Highway was cut near Narrabri. Crews were assisted in their efforts by firebombing aircraft. NSW RFS crews did not leave the fire ground until 31 January, by which time the extensive fire had burnt approximately 59,760 hectares.

Saturday 20 January saw an outbreak of fire on Sir Bertram Stevens Drive in the Royal National Park, south of Sydney. Burning more than 2190 hectares, the fire produced a large amount of smoke visible across southern parts of Sydney, Wollongong and the south coast and the alert status went to Emergency Warning.

Following the park's closure, a multi-agency response saw crews working to have the park reopened in time for the Australia Day long weekend.

Across this weekend a number of fires kept crews busy, including the Long Gully Road fire, Bannaby east of Taralga. DC10 Nancy Bird assisted fire fighters with retardant drops and heavy plant established containment lines.

Over the final week of January, storm activity and lightning was responsible for dozens of new ignitions, particularly around

the Blue Mountains/Wollemi National Parks, the Greater Hunter, Mudgee and Lithgow areas. The 695 Fire started 14 February in the Singleton LGA in the Wollemi National Park, with a National Parks and Wildlife firefighter seriously injured in a tree fall incident. It reached Emergency Warning (EW) status on 14 February. It was contained



Top: Table Top RFB in the Southern Border region. **Bottom:** The Moorebank Avenue fire, Holsworthy. Photo by Rachel Wildman



by the end of February with the assistance of heavy plant and firebombing aircraft.

The fire at Mt Canobolas to the west of Orange on 10 February threatened property and a communications tower. The air tankers and heavy plant helped construct containment lines around vital communication infrastructure.

An evacuation centre was set up at the Orange showground. The fire burnt out 1671 hectares of bushland, however no homes were lost.

The Bobbiwaa Creek Mt Kaputar fire, between Bingara and Narrabri, which started 15 February was contained by 22 February with Remote Area Fire Fighters dropped in to extinguish small

areas of fire activity in the inaccessible terrain in the following days. The fire burnt 4133 hectares of bush.

An Emergency Warning was released for a grass fire near Mulwala 28 February with VLAT Nancy Bird assisting.

In March, the loss of 65 houses and 35 cabins and caravans was a blow to the small far

south coastal town of Tathra. NSW RFS members and other services and residents fought furious and erratic fires. A report about the emergency response to the Tathra fires has been delivered to the Minister with 12 recommendations.

You can read more about the Tathra fires in the following pages.

On 14 April, a fire started on Moorebank Avenue, Holsworthy. It crossed Heathcote Road and quickly spread towards Alford's Point, Bardon Ridge and Menai threatening the urban fringe suburbs of Sydney. It was an extraordinary effort by ground crews, marine units and firebombing aircraft to bring this complex fire under control. Given the location near Holsworthy Army Base, Lucas Heights nuclear facility and high density suburbs, controlling this fire was a complex task. Crews saved six facilities, 877 homes and four outbuildings. Five homes were damaged and a cubby house was destroyed. The fire was contained on 17 April.

Challenging fires continued throughout April. Extensive smoke and dust storms affected a large area of the lower western border during a grassfire at Boomanoomana.

The Bush Fire Danger Period ended on 30 April. After one of the driest winters on record and a busy, long and drawn out season. ■



Top: The Dipper Rd, Dandry fire in the Narrabri LGA January 2018

Above: A haystack fire

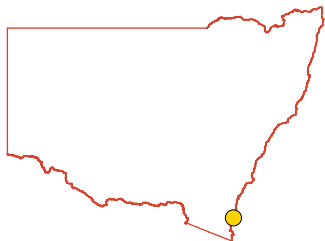
With Tathra under threat

As the residents of Tathra gradually move into the rebuilding phase after the traumatic period of demolition and sifting through rubble, the town's resilience is on show, albeit with an emotional backdrop.



Above: Cheryl of Seaspray Images was travelling along the Tathra Road towards Tathra to go fishing, but decided to stop at Wallagoot Lane turnoff and return home when she saw this smoke plume.

a community unites



The lingering smell of smoke had finally begun to dissipate, and the population of the Far South coastal town of Tathra began to rally. The regular town meetings, the fundraisers, the support from outside—both formal and informal—have contributed enormously to keeping the community informed and together.



The State government has provided \$10 million for asbestos removal and cleanup, the large not for profit support organisations have given practical support, the Bega Valley Shire Council's Mayoral Appeal Fund as of early July raised nearly \$1.3million. The Federal Government donated \$250,000 providing mental health and trauma support into the months ahead. Mayor Kristy McBain and the distribution committee have been overseeing the disbursement of funds to residents.

Communities from around Tathra and far beyond have raised funds and collected clothes and household items to help those who have lost their homes. The Tathra Ladies Golf donated \$3000 to the Tathra Rural Fire Brigade to help the Brigade build its capability for future incidents and Merimbula Imlay ladies bowlers presented a cheque for \$2,500. The Brigade will purchase a much needed new generator to use during major power outages.

The qualities of the community were evident during the fire and the days afterwards. A local Tathra Bakery gave free breakfast to residents and continues to raise funds; the local supermarket gave groceries, the surf club was a supportive drop-in centre providing aid to residents. A local coffee cart business provided unlimited free coffees for emergency workers and locals. These are just a selection of the many organisations and individuals providing support.

The Incident Management Team (IMT) operating out of the Fire Control Centre (FCC) brought together all participating agencies—the NSW RFS, NPWS, Forestry and FRNSW—to coordinate their resources strategically. All agencies worked alongside residents in extraordinary conditions to protect the people and property in Reedy Swamp, Vimy Ridge and Tathra.

All brigades in the Bega Valley were utilised including strike teams from Eurobodalla and Shoalhaven. This was the first major incident for the Operations Support Group who did an extraordinary job in extreme conditions.

Sunday 18 March saw numerous fires around the state, 18 of those burning in the Bega Valley, two of which—Kerison's Lane and Frogs Hollow—were very serious incidents. A fire started in the area of Tarraganda, east of Bega, about midday. It crossed the Bega River pushed by strong and gusty northwesterly winds. With estimated 80–90 km/h winds, the embers hurled across the town and onto the beach. The apparent random destruction of homes dotted across the town resulted from embers raining down on gardens and homes. Trees, gardens, decks, leaf-littered gutters burst into spot fires with fire fighters scrambling from one fire to another.

This was a challenging fire, not for its size or terrain, but because of its erratic behaviour fuelled by shifting wind gusts.

The fire was sporadic and spread out across the entire town of Tathra. It did not have one continuous edge, so crews were spread out. Winds were changeable, turning flanks into fire heads.

As the day progressed, a southerly change pushed the fire in a northerly direction. Southeasterly winds pushed the fire in the evening towards Dr George Road.

The local school was under threat as a gully to the northwest channelled the fire in its direction. The school grounds lost 120 trees which had become unstable and some shade sails and play equipment. In a small town the local school is a community hub and it was a huge relief that it was saved. The children were back at school on Tuesday 27 March, which was incredibly important for helping families regain a sense of security and normality.

“

When we came on shift the others had been on the go for 7 hours straight and were exhausted. We came on as the night shift. There were three people in the truck and the average age of the people in that truck was just under 70.”

Richard Gallimore
Tathra RFB

*Reproduced with permission
of ABC South East*

The Local Emergency Operations Controller (LEOCON) opened a Local Emergency Operations Centre (LEOC) in Bega to support the IMT fire fighting efforts and coordinate support to affected communities. The evacuation centre was established at the Bega Showground.

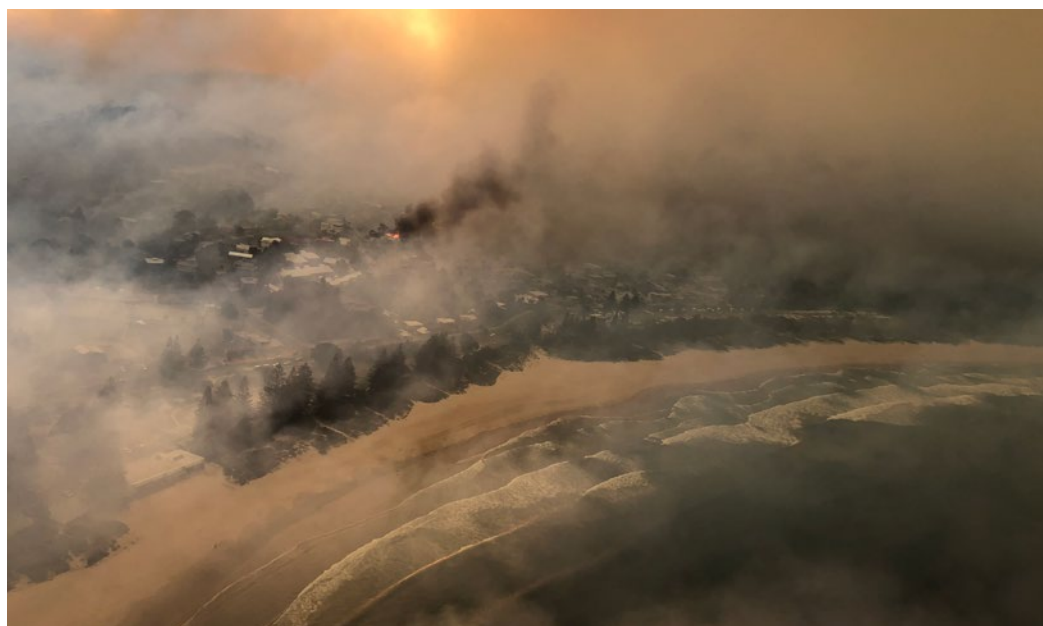
The NSW RFS Public Liaison Officers were giving early and frequent updates to those

in the evacuation centre, promising not to gloss over the details, and to keep them informed as the intelligence came in. Other organisations provided a range of services, check lists for uncontactable neighbours and family, food for domestic animals, blankets and clothes for those who'd escaped with very little.

The thanks to the firefighters and other emergency

service workers was evident immediately, with hastily erected signs showing the heartfelt appreciation of residents for the work they did to save their town.

Later investigations found that electrical infrastructure on Reedy Swamp Road was the likely cause of the fire. With media reporting from the streets before fires were out, and residents confined



Top: The entire coastal town of Tathra was shrouded in smoke. Photo by Caleb Keeney, Timberline Helicopters. **Above:** Western Sydney community group 'Sydney Youth Connect' travelled to Tathra to help feed the Tathra community in the days after the fire. Photo by Big4 Tathra Beach Holiday Park.

to the emergency shelter, it was crucial that the Building Impact Assessment (BIA) team got to work as soon as possible. The BIA team were on the streets of Tathra while crews still defended the town, knowing that residents wanted confirmation as quickly as possible whether their homes were still standing. As information became available, residents were ushered one by one into a private room to learn the fate of their homes. Understandably frustrated residents were unable to enter their streets as fire fighters assessed hazards and mopped up smouldering and reigniting trees. By 21 March all roads in the Tathra area were reopened to residents and to those with items still at holiday accommodation.

There were 65 houses lost, 48 damaged, and 35 caravans or cabins destroyed, which is heartbreaking for those who've lost their homes. More than 1390 hectares were burnt. But given the ferocious conditions it's important to acknowledge the numbers of homes saved and the most important fact that no lives were lost. Over 800 houses were saved or untouched by fire.

Euan Ferguson led the recovery operations, coordinating assistance agencies, keeping residents informed, and reassuring them that they would be cared for into the months ahead. As the incident moved out of the "response" phase a recovery centre was set up at the Bega Civic Centre so those affected by fire could meet with representatives from various support agencies.

Tathra bush fire recovery coordinator Euan Ferguson has handed over to Bega Valley Shire Council's Leanne Barnes. Ms Barnes says she will work with the NSW Office of Emergency Management.

In the face of isolated but distressing criticism about emergency response coordination, Former Federal Police Commissioner, Mick Keelty was commissioned by the government to undertake an independent review into the emergency response to the Bega Valley fire.

The report has been handed down and Commissioner Shane Fitzsimmons and FRNSW Commissioner Paul Baxter have welcomed the twelve recommendations and are working together to implement them.

They said it...

Responses from the Tathra Rural Fire Brigade captain, Adam Wiggins, and other members of the brigade give heartbreaking insights into what they faced as fire rushed to their home town.*

"I personally can't do everything and I might not even be able to do much, but collectively it all adds up."

*Sally Gallimore,
Tathra Rural Fire Brigade*

"This was home and home was being threatened big time. I could see the fires coming towards our house, but I felt my first duty was to go and fight the fires further away from the house. The whole time I knew my wife was left at home behind to try and protect our house."

Anthony Tailor

"I was wearing my fitbit that day and for about an hour and a half my average heart beat was 149 beats per minute and for half an hour of that it was 168 beats...you couldn't breathe, you couldn't see 2 foot in front of yourself... my lips were blistered, I had burn marks in my ears where the embers were landing.

"I couldn't sleep that night. I was so tired but my eyes wouldn't shut they were that swollen... I feel a bit of responsibility... this is my patch... it's hard not to feel like you've let 'em down a bit.

"Good mates lost houses and there was nothing you could do... I'm so immensely proud of my guys. The pride I have in my brigade is pretty high."

*Adam Wiggins,
Captain, Tathra Rural
Fire Brigade*

**Quotes reproduced with permission from ABC South East*

District Manager, Region South, John Cullen commended the strong relationships among the local council, Bush Fire Management Committee

and the community. These relationships were established long before the fires began and are crucial for the community's recovery and resilience. ■



Above: Despite the fire's intensity, 1390 hectares razed and the loss of 65 homes, thankfully there was no loss of human life. Photo by Andrea Olson.



Canadian Deployment

Wildfires raged throughout the Canadian province of British Columbia during the summer of 2017.



Above: The extent of the fire is evident from the scale of the fire fighting aircraft in the sky. Photo by Rolf Poole.
Top right: Nights were cool for fire fighters on the campground.



Rolf Poole, Grant Paisley and Chris Hunter write about their experiences during the Canadian deployment in 2017.

The NSW RFS and Emergency Management Victoria, on behalf of the National Resource Sharing Centre, jointly coordinated the deployment of Incident Management Team (IMT) personnel and for the first time firefighting personnel to British Columbia (BC), Canada. IMT personnel included public liaison officers, fire behaviour analysts, aviation specialists, logistics officers, and a large number of firefighting resources. Personnel comprised: NSW RFS (90), Fire & Rescue NSW (5), National Parks and Wildlife Service (35), Forestry Corporation of NSW (4), ACT RFS (45), QFES (6), and NT(1). NSW RFS Assistant Commissioner, Steve Yorke AFSM, was pre-deployed to British Columbia to assist with logistical arrangements ahead of the main deployment. A total of five deployments were coordinated from July to September 2017.

When the call came for assistance, a State Operations team assisted by Remote Area Firefighting and Specialised Operations (RAFSO) and Membership Coordination Unit worked quickly to finalise personnel suitable for the roles requested by Canadian Fire authorities. Personnel were chosen from those who had previously expressed interest and had passed tests necessary for overseas deployment. The State Logistics Team and MCU were critical to the success of each deployment.

Incident Management Inspector Rolf Poole

The initial deployment to BC consisted of two multi-agency IMTs and a number of single resources who were deployed where needed.

At the Chilcotin Fire Centre, a few hours west of Williams Lake in BC, I met with the rest of the IMT I'd be working with for the next 14 days.

The Incident Controller, Plans Chief, Operations Chief and Logistics Chief were from Nova Scotia and New Brunswick.

The remaining IMT members were Australians from NSW RFS, FRNSW, Tasmanian Fire Service, Victorian CFA and South Australian CFS. We soon earned the nickname "Team United Nations".

Camp Life

Our team was based at the Puntzi Tanker Base at a Forestry Fire Camp. The Australian contingent stayed at several camps including Williams Lake, One-Hundred Mile House, Puntzi, Alexis Creek and Cache Creek, among others. Shared accommodation was large tents with stretcher bed cots, or two person tents for individuals. During the deployment temperatures ranged from -2 degrees C to 36 degrees on some days.

There's a great camaraderie at fire camp, with a culture of swapping service badges, pins, flags or any form of memorabilia and many come prepared with items to swap. We were often questioned about the types of fires we get and how they compare to northern hemisphere wildfires. Canadians are also fascinated with Australian animals that can kill you. Occasionally there would be a very serious comparison of grizzly bears, black bears and the elusive Australian drop bear.

Engaging with local communities

My first deployment was to Puntzi as a Public Liaison Officer (PLO). The Chilcotin Plateau is a picturesque mixture of steep mountainous terrain, First Nations Reserves and forestry operations, as well as isolated ranches and log cabin holiday accommodation. Communities are remote, several hours drive away from major towns, with poor or no mobile phone service. When we arrived, the landscape was extremely dry. The Puntzi IMT managed a complex of five fires, some in inaccessible terrain and others threatening small communities and ranches. Many parts of the Chilcotin Plateau were under an evacuation order, meaning



residents were required to evacuate and not return until the order is lifted. Some local residents had chosen to defy the order and remain with their homes.

As the PLO my role was to keep up to date with the fire status, engage with communities and feed situation reports to the regional office for inclusion in fire updates. The target audiences were the ranchers and the indigenous First Nations communities who were determined to remain in their communities. The focus was to provide them with regular updates so they could make informed decisions and have clear trigger points for action, as well as to engage them as part of the operation.

Chief Irwin Charlie-Boy and Councillors Otis and Percy Guichon from the Tsi-Del Del First Nations Community at Redstone were among the key stakeholders who facilitated the flow of communication. The neighbouring indigenous community of Ulkatcho at Anahim Lake was also engaged as a high priority. With significant aboriginal heritage sites as well as built infrastructure, we needed community knowledge to identify the assets needing protection.

The First Nations' concerns included the wildfire threat to community-managed logging operations and infrastructure as well as the employment of local firefighting teams as part of the operation. BC does not engage volunteer fire fighters as does NSW, with many small communities relying on firefighting as a source of income. Another First Nation concern was the traditional mushroom foraging by the Ulkatcho and Tsi-Del Del communities, which would usually occur after a wildfire.

It was a unique and rewarding experience to work with the indigenous communities and gain a greater appreciation for their culture.

A local fire fighter was demonstrating how to feel for heat underground and shoved his arm down a hole up to his shoulder. The Aussie fire fighters all yelled “you would never do that in Australia!”

Operations

For the second rotation I was deployed to the Van-Jam Fire Centre in Vanderhoof, an hour north of Prince George and was tasked as Operations Chief. There were ten fires in the surrounding area with three uncontained.

The Big Bend Creek Fire 837 had escaped its original containment lines from the previous weeks and presented the biggest threat in the area. While comparatively small compared with others burning in BC, it was burning high value timber assets.

I had been paired up with an Incident Controller from BC, Bruce Doerkson, and our collaborative objective was to formulate prescribed back burning operations and containment strategies. We dedicated the first few days to creating strategic control lines or “guards”, utilising strike teams of heavy plant machinery under the guidance of the heavy plant manager Gordon Clarkeson. Gord’s experience managing the machinery meant that we could concentrate on broad strategies and he could provide feedback on what was realistically achievable within the timeframes.

Operations in BC had significant differences to those in eastern Australia. Operating in a dry continent, Australian firefighting has adapted to

mobile carting of water. In BC there is a complex lake system and despite the dry vegetation, water is never far away. Australian crews utilise a variety of fire appliances to carry water to the fire ground, whereas the BC crews utilise the lake systems and run hose lays with buoy walls (portable dams) nicknamed “pumpkins”. With hose lays often running for several kilometres, the set up can take a number of days to prepare.

Australian vegetation ignites more readily and burns at a faster rate of spread. Vegetation in BC burns more intensely, but fires are slower to reach the canopy and crown. In general terms, in BC there is more time to establish control lines and prepare hose lays. Implementing operational strategies and tactics can be

at a different tempo due to the time it takes to establish a control line or “guard” and then establish kilometres of hose and relay pumps.

At Van-Jam the Unit Crews were available only during a 12-hour daylight shift. With no crews available for night operations, strategic backburning had to be conducted during the warmest and windiest part of the day.

At Fire 837, backburning was implemented with ground ignition crews, commencing at an anchor point and working for several kilometres along dirt roads and constructed guards. The ignition patterns were guided and directed from the observation aircraft.

Backburning and prescribed burning is not as common in BC as it is in Australia



Below left: A lot of time was spent laying out kilometres of hose to siphon water from local rivers and lakes. **Top right:** Vegetation in BC burns more intensely, but fires are slower to reach the canopy.

for a variety of reasons, so experienced ignition crews were in demand. We were fortunate to have the local Titans & Rhino Unit Crews who had previous experience conducting ground ignition.

At the end of the second two-week rotation, effective suppression strategies had been implemented on the Big Bend Creek Fire 837. At the time of my handover the fire operation was progressing into the demobilisation and rehabilitation phases.

The challenging experience certainly left me with a sense of achievement and was truly rewarding.

Fire fighters' perspectives

Grant Paisley, Arcadia Brigade, Hornsby / Ku-ring-gai District reflected on his experience as a member of the Australian Remote Area crews.

The deployment was hard but rewarding, and as agreed in our deployment shift guidelines we worked 12 hours a day for 12 days straight. The fire camps we stayed at had up to 500 firefighters and towards the end of the deployment temperatures dropped to minus five degrees overnight.

The challenges for Canadian firefighters are very different from Australia. The fire smoulders for days or even weeks in the duff layer which consists of matted roots and plant material and can be up to one metre deep. When there is a hot, dry day the smouldering duff layer can result in the re-ignition of the pine trees and the fire takes off again. On one occasion a local fire fighter was demonstrating how to feel for heat underground and shoved his arm down a hole up to his shoulder. The Aussie fire fighters all yelled "you would never do that in Australia!"

The good news is there is plenty of water, so basically you set up containment with kilometres of 38mm hose pulling water from a river or

creek, then patrol each day literally digging up the fire. At the end of each day you had to disconnect every hose to prevent water freezing inside the hose overnight. The terrain was super steep and on our second deployment we put in a line from 1600m to the snowline at 2200m.

Across much of BC a native pine beetle is killing many of the trees, up to 80 percent in some places. The beetle would normally be controlled by a winter cold snap—a sharp drop in temperature to minus 40 degrees Celsius—but there hasn't been such a cold snap for several years so the beetle damage is extensive. The dead vegetation has contributed to the worst ever fire conditions in Canada.

The firefighting "appliances" are hundreds of large pickup trucks hired from all over Canada and the USA. The vehicles are equipped with a portable radio that is mounted to a piece of wooden board with a magnetic aerial. The "bread board" radio is gaffer taped to the dash. The pick-up truck holds four fire fighters, hoses, pumps and polaski tools thrown in the back. During our deployment we drove over 5,000km.

The professionalism and depth of training we NSW RFS crews receive prepared us very well for our time in Canada. It was wonderful working with local crews. The fires affected a large number of Canadians and they appreciated our help. We were even shouted a beer in a pub by some locals.

Chris Hunter from Ku-ring-gai Brigade was deployed to the Elephant Hill fire for two two-week blocks and was part of an Australian team led by a local divisional commander. He found the firefighting activities very different from those in Australia in terms of vegetation, equipment and strategies.

As Grant noted, fires behave differently in the Canadian

vegetation, with quiet trickling fire behaviour like in NSW coastal heathlands. Alternatively, if the fires got into the dry pine plantations, crowning fires were impossible to fight from the ground so they use many more aircraft. The landscape was sometimes steep and rugged, but there was also undulating land and moderate slopes.

Unlike the NSW RFS, which has a permanent off-road fleet that is truck or tanker based, in BC there were many seasonal or contract firefighters employed by the BC wildfire service. They use more portable equipment and aircraft with far fewer off-road vehicles. There are a lot of people on foot, ferried around on hired pickup trucks.

The Canadians use long hose lines whereas in Australia you'd drive tankers down a five-kilometre fire trail and use that as your control line. In BC a lot of time was spent laying

out and filling kilometres of hose and later recovering, then redeploying it.

At times, Chris comments, we'd fill a pickup truck with 40 to 50 hoses to be deployed and used with pumps and buoy walls.

The Canadians do minimal backburning. At times it's quite hard to light fires and get them going if conditions aren't right and the fires were patchy and ineffective.

The Australian firefighters worked in Australian teams, but mixed with Canadian, Mexican or New Zealand firefighters in camp at night. Chris said he missed a proper bed as they bunked down in two-person tents, sleeping on the ground with a foam mattress and sleeping bag.

The Australians were treated to different wildlife as well as different equipment and firefighting strategies, with deer and chipmunks common and a bear sighting in the distance. 🍁





Region North Exercise

The New England town of Glen Innes hosted the Region North Exercise in April.

The Glen Innes Showground is a picturesque venue for the base camp, with plenty of room for people to pitch their tents and roll out their swags under the poplar trees.

Forty-nine appliances rolled in on Friday afternoon and overall 363 personnel attended. As well as Region North brigades, crews, appliances and supporting personnel were invited from Region East and from Queensland Fire & Emergency Services. Through the Border Liaison Committee, a number of interstate New South Wales and Queensland border brigades have a history of cooperative exercises. Nine trucks travelled across the border from Queensland.

The Region North exercise has been held in the New England town since 2003. The variety of facilities available for scenarios is one reason why Glen Innes has proven such a successful location. Scenario Marshalls set up and supervise the activities around Glen Innes at the airport, the NSW Agricultural Research and Advisory Station and other local areas.

Regional exercises are held to teach and refresh members' knowledge and to practice basic firefighting procedures by simulating a range of

fire-related exercises. The scenarios typify the situations that brigades would encounter under normal operations. They provide supervised learning environments and comprise an instructional element then the

crucial opportunity to practice the theory. Scenario staff explain and show crews how to deal with a particular incident, then give them time to practice their response.

Divisional commanders rotate their assigned strike teams through each scenario before releasing them to the next division. The twelve scenarios at the Region North exercises included: a motor vehicle accident replete with

made-up volunteer "victims", practical pumping, Essential Energy electrical, basic skills, vehicle maintenance, pump maintenance, heavy plant and aircraft engagement, a gas scenario, CT, a first aid situation, extinguishers and a protect and preserve scene.

As well as providing a range of incident practice, a regional exercise provides an opportunity for Incident Management Teams (IMT),



Above and right: Forty-nine appliances and 363 personnel attended the Region North Exercise. All photos by Sharon Quandt.



catering and communications units to practice the management and coordination of a large scale operation.

The IMT operated from the Northern Tablelands Fire Control Centre in Glen Innes. Strike Team Leaders commanded strike teams of up to five appliances, a communications operator and command vehicle.

The healthy spirit of competition spurs on the brigades and

awards are given in a number of categories with this year Thora 1 taking out the Overall Best Performing Crew.

The Organising Committee and Incident Management Team worked with districts to facilitate a challenging, invaluable and enjoyable weekend. The crews rolled out of the base camp on Sunday, waved off by the enthusiastic cheers of the catering squad in the grandstand. ■



REGION NORTH EXERCISE AWARD WINNERS

The Thora 1 Crew from the Mid North Coast were awarded the Alan Brinkworth Perpetual Trophy for Best Performing Crew (below). At the presentation ceremony held early Sunday afternoon a range of prizes were awarded.

TJ (Tony Jarrett) Award for Best Strike Team Leader:

Mark Bagnall, Northern Tablelands

Best Crew Leader: Todd Travers, Mid North Coast

Committee Encouragement Award:

Will Ambrose, Far North Coast

Committee Encouragement Award:

Kevin Mason, New England

Outstanding Crew Member: Zac Andrews, Northern Rivers

Outstanding Support Person: Hannah Birkenhead, Northern Tablelands

Best Presented Truck: Wingen 1, Glenugie 1, Woodlea 51 QFES, Thora 1, Kundle Moto 2, Tucabia 2

Appreciation Plaques were presented to: NSW Police, Ambulance NSW and Fred Brown GAAM (Retired) for their hard work and commitment to the Regional Exercise over many years.





The ANZAC Memorial at Chunuk Bair

The Department of Veterans Affairs contracted the NSW RFS to provide up to 30 volunteers to participate in activities supporting Anzac Day 2018 commemorations at the Gallipoli Campaign Historical Site in the Republic of Turkey. Specifically, the activities were to support the Dawn Service and the Australian Memorial Service at Lone Pine.

The Gallipoli Peninsula, known as Gelibolu, was the site of the Battle of Gallipoli, or the Dardanelles Campaign between 17 February 1915 and 9 January 1916. The Allies launched a naval attack followed by an amphibious landing on the peninsula. With the naval attack repelled after eight months' fighting and enormous casualty rates on both sides, the land campaign was abandoned and the invasion force withdrawn to Egypt.

The campaign was the only major Ottoman victory of the war and in Turkey is regarded as a defining moment in the nation's history.

For Australians and New Zealanders, too, 25 April—the anniversary of the landings now known as ANZAC Day—is considered a defining moment in their history.

In response to the request for support from the Department of Veterans Affairs, the NSW RFS put out a call for Expressions of Interest (EOI). The EOI was designed to identify appropriately qualified members with the life experience to be able to cope in outdoor remote environments overnight and be able to successfully engage with visitors of all ages and all walks of life.

For those members fortunate enough to be chosen from EOI, this was a very special deployment for a host of reasons: they were representing the NSW RFS; representing their country; commemorating fallen soldiers; working with the welcoming Turkish people and assisting the community.

They had an important job to do, and as the NSW RFS does, the volunteers undertook a range of roles to help things go smoothly and safely. They supported visitors and Australian and New Zealand officers at the memorial service, welcoming and guiding visitors and helping with coach registration.

The teams were tasked with monitoring and assisting those visitors to the site who were high risk or who had high needs or with limited mobility in case they became unwell or needed help. They handed out information packs at site entrances, and assisted with visitor movements to, on and around the Gallipoli Peninsula during the commemorative period. The role for those deployed was a practical one, one that was very much about serving the needs of the visitors rather than attending the service themselves. The teams were on site working from the evening of the 24th through to the afternoon of 25 April at

various sites and locations on the peninsula which included Anzac Cove, Beach Cemetery, Shrapnel Valley, Mimosa Oto Park and the Southern Entrance and Lone Pine.

Security at the sites is the responsibility of the Turkish authorities who provide considerable military, Jandarma, police and medical assistance to the commemorations each year. Each of the teams had at least one member with Critical Incident Support Service (CISS) training. As a prelude to the tasks at the site, the rather jet-lagged members were treated to a full day tour of the ancient cities of Troy and Assos. And, after their duties were completed at the commemorative sites, the teams enjoyed a tour of the island of Bozcaada before flying back home.

The deployment could not have gone ahead without the financial support of Mastercom, a silver sponsor of the deployment team.

Walking past the trenches was the time I really connected with Gallipoli. After over 100 years the marks of war are still evident. In many ways it's similar to walking through a fire ground after a fire is out.

The scars and history is still there but the noise and fear is gone.

Thomas Hogg

In the words of Brian Graham ("BJ"), the Gallipoli Team Co-ordinator, "this incredible team sets the bar very high, it will be difficult to replicate the camaraderie, spirit, love and support that this team displayed throughout the deployment."

Gallipoli has a special place for Australians, especially so for those with relatives who fought there, some of whom are buried there.

For the members who were deployed, it was an emotional experience. Donna Brotherson recalled an official reminding them that wherever they walked around Lone Pine they were walking over the bodies of our soldiers.

She said "just below you are all of those young men—sons, brothers, lovers, friends, who never stood a chance and

died so needlessly. . . such a waste".

Some of the members took time out to visit the graves of their relatives. Gay Willis had promised her grandmother that one day she would honour her ancestors there, so she was grateful for "the opportunity to honour and farewell" her forebears at Gallipoli.

She says that with "so many unidentified soldiers, I found it overwhelming, I felt as if all those poor souls were still there watching us".

Brigade members often talk about their brigade as their other family, often enough that it can feel clichéd. But it is true and those relationships are built on the camaraderie and teamwork that grows when you work side by side.



Gay Willis says of the group who went to Gallipoli, you are "working with people you have known for only a couple of days, but everyone's training kicks in and it's like we'd been doing it together forever".

Jet-lagged they might have been, and long hours spent fulfilling their tasks, but to hear their comments you can tell that doing the job brought this diverse group of members together.



Top right: ANZAC Day commemoration at Lone Pine. NSW RFS volunteers wearing red shirts in the foreground.
Below right: The NSW RFS Gallipoli Deployment team 2018



A frequent comment was the thanks given to the Turkish people, who continue to welcome Australian and New Zealand visitors year after year. One member of the group comments that she was "humbled by the love and kindness the Turkish people show in caretaking such hallowed ground".

Lesley Smith acknowledged "the openness and warmth of the Turkish people who had experienced such great losses of their own". ■

Above: ANZAC and Turkish trenches recreated in the nearby town of Eceabat.

MASTERCOM was the Silver Sponsor of NSW RFS Gallipoli Deployment 2018



They said it...

"That first day, standing at Beach Cemetery was truly life changing...This was a stunningly beautiful location and then you turn and look at the headstones, so many headstones of young men who were really just kids... I have struggled over the last month to reconcile the sheer beauty with the sheer horror and tragedy that occurred on that very spot."

Donna Brotherson

"Finding Reg Duke's grave was pretty special to me then giving his nephew some sprigs of rosemary from the two planted at either end of the headstone and a photo as well when I got home made me feel pretty honoured to have had this opportunity. Lest we forget."

Wayne Connors

"...as an ex serving Australian Army Medic, visiting the grave of John Simpson Kirkpatrick and standing in the footsteps of the ANZAC diggers in the remains of the original Australian trenches at The Nek stood out as two of the most poignant moments. I never imagined when I joined the RFS nearly 15 years ago that it would one day take me to the other side of the world to take part in commemorating what is such a significant event in our country's history. I'm truly proud and grateful to have been involved in what will hopefully become a long legacy of RFS involvement in ANZAC commemorations at Gallipoli."

Ryan Clarkson

"I found some graves from Pop's regiment and could only imagine the heartbreak he must have gone through."
[Kylie's grandfather survived and returned to settle in Victoria.]

Kylie Ledger

To represent your country, the NSW RFS and pay my respect to those fallen, what a great honour."

Condy Kwan



NSW RURAL FIRE SERVICE



NSW RURAL FIRE SERVICE STATE CHAMPIONSHIPS 2018



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Fire incidents involving electric

There are more electric and petrol/electric hybrid vehicles on our roads, which will see a rise in the likelihood that NSW RFS members will need to safely manage incidents in which they're involved.

Electric vehicles are now being sold in Australia from manufacturers as diverse as Tesla, Holden, Volvo, Toyota and Mitsubishi.

The increase in numbers of LPG-fuelled cars on our roads over the last decade has seen firefighters adjust incident size-ups to consider whether "routine" car fire calls may in fact be gas fires with Boiling Liquid Expanding Vapour Explosion (BLEVE) risk.

In the same way, firefighters need to understand the characteristics, hazards and firefighting considerations associated with electric vehicles to ensure that safe and effective firefighting is carried out.

This article will not cover the generic safety and firefighting considerations common to all motor vehicle incidents (such as scene safety and hose/branch use), but will focus on the factors that firefighters must be aware of when dealing with electric vehicles. Remember, the NSW RFS role at vehicle incidents is fire protection.

If there is a likelihood that people may be trapped and/or injured, immediately tell FIRECOM that rescue, police and ambulance services are required, while providing first aid and assistance wherever necessary.

Characteristics of electric vehicles

Electric vehicles may be powered solely by a large battery, or by a combination of a petrol engine and battery. Either way, the battery remains a common feature.

Vehicles may contain two batteries: a low voltage 12v lead-acid battery similar to those found in traditionally-fuelled vehicles to power auxiliary systems and a large high-voltage DC battery (between 270v–400v) to power the drivetrain. High-voltage batteries can be nickel metal hydride (NiMH) or lithium ion (Li-Ion) types. Firefighters may be unable to identify electric and hybrid vehicles on sight. Many vehicles have visually similar bodies (eg Toyota Camry)

with only a small "Hybrid" badge to differentiate the electric version from the petrol version (in the same way that LPG-powered vehicles have only a small red diamond on the number plate). Therefore, firefighters must not assume that vehicles at an incident only have traditional petrol or diesel engines.

Electric vehicles run silently. The absence of traditional engine sound does not indicate that the vehicle's systems are not running.

Every electric and hybrid vehicle model differs in battery size and location, the running of high voltage cables, and the location of battery isolation points. Firefighters should familiarise themselves with emergency response guides to various vehicles, available on manufacturers' websites.

High-voltage batteries may require extensive cooling to be rendered safe from potential reignition; manufacturers agree that water is a suitable extinguishing and cooling agent, but large volumes may be required for some time.

Hazards

Always assume that all high-voltage components of an electric or hybrid vehicle are live. Some manufacturers advise that when fire is involved, consider the entire vehicle to be live. Never attempt to breach a high-voltage battery casing. Do not touch orange, yellow or blue cables.

Fires in electric vehicles may be in the vehicle body impacting the battery or in the battery itself. Both NiMH and Li-Ion batteries affected by fire can produce toxic smoke and fumes. Breathing apparatus should be worn; if not available, firefighters should stay well clear of the vehicle.

Electric battery systems run on Direct Current (DC). DC current cannot be detected by AC current detectors (such as modieworks), so do not rely on detector readings.

Electric vehicle fires may occur when the vehicle is charging and connected to an AC charge point. These fires are to be managed as per other fires involving electricity.



and hybrid motor vehicles

By Inspector Dan Meijer, NSW RFS Operational Doctrine and Standards

High voltage batteries affected by fire can emit toxic smoke and fumes. Full PPC and breathing apparatus should be worn for firefighting.

SRS airbags and seatbelt tensioning devices may retain current for some time even after a battery is isolated.

Approach and Arrival

Consider wind direction to keep vehicles and firefighters clear of toxic smoke from vehicle fires.

As soon as you identify that an electric vehicle is involved with fire, immediately locate a water supply. If hydrants are not available, immediately request the attendance of additional tankers from

FIRECOM. Electric vehicle fires require substantial volumes of water to cool batteries for some time.

Rescue

Immobilise and disable the vehicle if possible. Rolled canvas hose lengths can be used as improvised wheel chocks. If possible, put the vehicle into "Park" and if applicable, turn off vehicle power at the "Stop/Start" button.

Suppression

The accepted firefighting technique to extinguish an electric vehicle fire is to use a fast aggressive offensive attack to extinguish fire in the vehicle body, to reduce fire impact on the high voltage battery.

High voltage batteries affected by fire can emit toxic smoke and fumes. Full PPC and breathing apparatus should be worn for firefighting.

If breathing apparatus is not available, firefighters should stay clear of the affected

vehicle and conduct defensive firefighting, allowing the battery to burn out while protecting exposures. P2 masks and similar devices do not provide protection against toxic fumes.

Water should be applied to the battery well after the fire appears to be extinguished. This may require up to 10,000 litres of water. In particular, Li-Ion batteries may reignite if not sufficiently cooled. There must be no fire or smoke in the battery for at least one hour before a vehicle is handed over to a recovery service.

A damaged NiMH battery that has its case breached may emit a caustic alkaline solution. This is extremely unlikely to occur, but if it does, advise FIRECOM of Hazmat presence and request attendance of FRNSW.

Positive-pressure ventilation fans and water streams can be used to direct smoke away from firefighters, other emergency crews and bystanders.



Example of badging that identifies a hybrid petrol/electric vehicle.

Overhaul

Ensure vehicle is completely immobilised. Use a thermal imaging camera (TIC) to identify hotspots and evaluate battery temperature trends.

Use tools with insulated handles, and always assume the presence of an electrical risk.

Ensure batteries are sufficiently cooled before handing vehicles over to recovery personnel and warn them of potential reignition.

Conclusion

Given that it is not clear when approaching a vehicle on fire what fuel type it uses, members should always be ready to encounter electric or alternative fuel vehicles and proceed accordingly. ■

NOT WHAT WE EXPECTED

Crews confronted a fire in a shipping container with little knowledge of its dangerous contents.

By Andrew Macdonald, Group Captain, Macarthur Zone

Around midday on 7 May, three RFS crews with Cat 1 tankers were mopping up a roadside grassfire in south west Sydney when a local resident notified them of a burning shipping container on a nearby property.

The crews arrived on scene about three minutes later to find a 12-metre shipping container and surrounding area alight. The property owner was not at home, but a concerned neighbour provided some helpful intelligence when he mentioned that the shipping container might contain live ammunition. Based on this information the incident controller requested the attendance of Fire & Rescue NSW (FRNSW) for the provision of technical advice.

Among the crews were two CABA-qualified RFS members who quickly donned breathing apparatus and commenced direct attack. The other two brigades ensured an adequate water supply was established. Electricity to the shipping container was identified and isolated at the main residence. Crews considered, but ultimately rejected, the idea of using a quick cut saw to gain access to the shipping container, given it was unknown what hazardous or dangerous items were inside.

The shipping container had rusted through in places which allowed firefighters some limited access to reduce the intensity of the fire burning within the container. In consultation with FRNSW a decision was made

to open the end doors of the shipping container. It was fortunate that the doors were at the opposite end of where the main fire was seated, which was primarily outside the container. When these doors were opened crews were confronted with numerous boxes and drums of loaded shotgun shells and a number of large drums of gunpowder.

A CAFS (Compressed Air Foam System) tanker was requested from FRNSW. This specialised tanker carries 9,500 litres of water which can be automatically mixed with foam. Crews filled the shipping container with foam, ultimately cooling and suffocating the fire. The added advantage of this strategy was that the shipping

container didn't need to be manually emptied to ensure fire extinguishment.

There is no doubt that valuable information from a neighbour and some luck led to a far safer outcome than may have otherwise resulted. Just something else to add to the long list of unknown hazards we all potentially face when attending structural fires. ■

Top left: The shipping container and surrounding items ablaze.

Bottom left: NSW RFS firefighters gain entry to the container. **Right:** A drum displaying just a portion of the shipping container's contents.





New NSW RFS Brigade Constitution takes effect

From 1 July 2018, the new NSW RFS constitution automatically covers all brigades.

The new brigade constitution follows one of the most extensive consultation processes in the Service's history, and more recently road testing with brigades to ensure it will work.

Every brigade needs a constitution and the new constitution will help streamline the management of brigades, while also ensuring the brigade can customise it to maintain their local identity and rules.

To assess whether your brigade wants to make any changes, you'll find the information you need on MyRFS or from your district office.

Here are a few quick Q & As to get you started.

Why does my brigade need a new constitution?

In the 20 years since the NSW RFS was established the Service and its members' roles and responsibilities have changed significantly, as have the laws under which we operate – such as tax deductible donations, work health and safety, and compensation in case of accidents.



Glen Elgin Brigade, in the Northern Tablelands, conduct their AGM in the open air. Photo by Bronwyn Waters, District Coordinator

The new constitution reflects those changes and helps ensure that brigades are operating within the law. It helps protect members if something goes wrong by, for example, providing clarity about membership. In an extreme circumstance, it may become critical in the event somebody is injured, to seek clarity on whether they were volunteering at the time.

The new constitution also provides more scope for volunteers to manage the way they run their brigades. For instance, a small far western brigade might have different features and needs from a brigade with a larger membership base.

So while a brigade constitution may seem like a necessary but not frequently used document, it is one of the most important documents for a brigade.

Is this just more administration for the sake of it?

This change to the constitution has actually come about because of listening to members' feedback across the state and through extensive consultation.

Brigades want the autonomy to make brigade rules that suit their circumstances. It's also because we want to ensure that all members are legally protected.

What is the easiest way for us to implement the new constitution?

The easiest way is to do nothing. The new constitution automatically came into effect on 1 July 2018.

This gives brigades a safety net—if anything goes wrong, the new constitution will apply.

What is new?

Here are some of the issues covered in the new constitution:

- Simplified membership categories
- Requirements for safety training
- Establishing quorums which suit the brigade, and the use of technology to attend meetings
- Providing financial guidance and protection, such as having a common financial year across the state to meet government requirements

But what if the new constitution doesn't suit us? Can we change it and what kinds of things can we change?

There is a standard constitution that automatically applies to all brigades, but individual brigades

continued page 28



NSW RFS New Constitution

First Level – Member Types

FIXED – defined in constitution

ENTRY CLASSIFICATIONS



JUNIOR

Junior service
counts to probation

OR



PROBATIONARY

(minimum 6 months)

Second Level – Member Types

FLEXIBLE – can change
with member circumstances

- OPERATIONAL SUPPORT
(default)
- ADMINISTRATION

- OPERATIONAL
(default)
- RESERVE
- OPERATIONAL SUPPORT
- ADMINISTRATION
- CFU

Third Level – Member Roles

OPTIONAL – can have
multiple roles

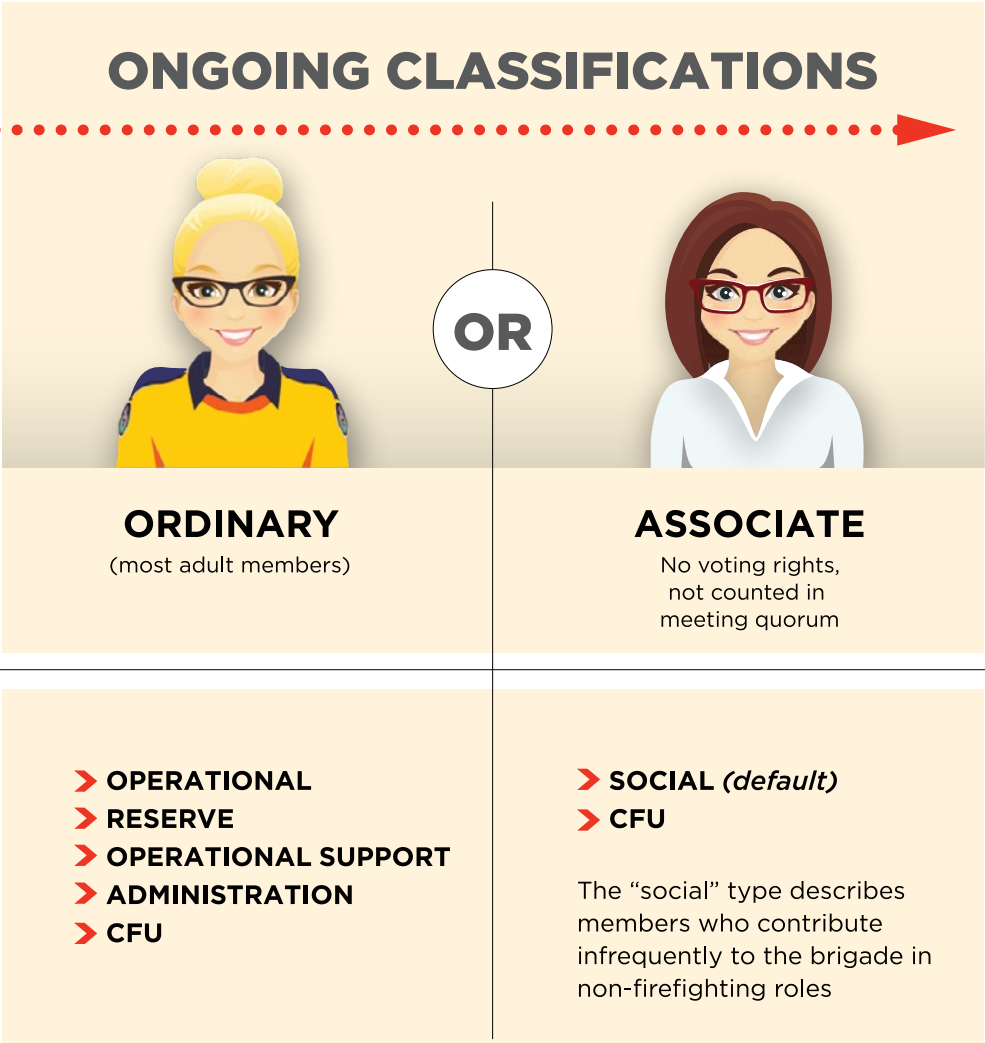
- President
- Vice-President
- Secretary
- Treasurer
- Membership
- Fundraising
- Health & Safety

- Training
- Junior Member Co-ordinator
- Call-out/logistics
- Station Officer
- Equipment Officer
- First Aid Officer
- Catering Officer

Some of the possible roles outlined in the Brigade Management Handbook

Member Classifications

At the right time, the Brigade votes to convert probationary members to one of the ongoing membership classifications. Junior members can apply for ongoing membership when they turn 16 years of age.



How your brigade is structured will define what roles will be needed. *(Is it time to review your brigade structure?)*

For more information about brigade structures and roles, refer to the Brigade Management, Recruitment and Retention resources available on MyRFS.

Sourced from the Brigade Management Handbook, available on [MyRFS.nsw.gov.au](https://myrfs.nsw.gov.au)



< Continued from page 25

also have lots of opportunities to create Brigade Rules and Standing Orders that suit them.

There are 17 areas in the constitution where your brigade can customise the constitution using Brigade Rules, ranging from voting processes to who can vote for roles in the brigade.

In addition, you can also create Brigade Standing Orders. These can cover basic rules about the running and maintenance of the station, or rules about attending training sessions.

Your brigade can decide on criteria for life membership

and decide on the quorum for AGMs. In the new constitution, the default number is 15 percent of members, but you can make it more if your brigade chooses.

The terms of office and voting of field or administrative officers can be varied. Brigades have various procedures for nomination of officers and to establish different voting methods (first past the post/ secret ballot or show of hands/ who can vote). Again, there is a default, one year for every position, but members might vote to change this duration.

The thing to stress is that it's your constitution, so brigade

members are encouraged to think through the brigade's needs and create brigade rules so the constitution will best suit your individual brigade's needs.

How do we go about reviewing the constitution? What does it involve?

Make a brigade rule by holding a brigade meeting. Advise members at least 21 days prior to the meeting of the motion to make a brigade rule. Vote on the brigade rule, 75 percent of ordinary members at the meeting have to agree for the brigade rule to be adopted.

After your brigade has voted

on any brigade rules for your constitution, they need to be reviewed by the district.

Submit the constitution and brigade rules to be posted on MyRFS, so that they're in a place where all members can refer to them.

Remember if you need assistance, there are templates, information packs and videos available on MyRFS or from your district office that can guide you in your discussions.
<https://www.myrfs.nsw.gov.au/InfoAbout/BrigadeManagement/NewBrigadeConstitution.aspx>

GET READY WEEKEND

22-23 SEPTEMBER 2018 4 SIMPLE STEPS TO PREPARE FOR BUSH FIRE



1. DISCUSS

Know what you and your family will do if bush fire threatens your home.

Have a plan.



2. PREPARE

Get your home ready for bush fire season.

Check www.rfs.nsw.gov.au/plan for the 5 actions to make your home safer.



3. KNOW

Be mindful of the bush fire alert levels.

You will find these on the NSW RFS website, on the radio and in the 'Fires Near Me' app.



4. KEEP

Keep the key contact numbers and websites on hand, such as:

Emergency Triple Zero (000)

Bush Fire Information Line:
1800 NSW RFS (1800 679 737)

NSW Rural Fire Service Website:
rfs.nsw.gov.au

Fire Danger Ratings: **rfs.nsw.gov.au/fdr**

'Fires Near Me' Free smartphone app

Local radio, TV and newspapers

facebook.com/nswrfs

twitter.com/nswrfs



GET READY

PREPARE. ACT. SURVIVE.

www.rfs.nsw.gov.au

YOUR HEALTH MATTERS AT THE NSW RFS

Over the past 10 months the NSW RFS has been implementing a health promotion program called Your Health Matters (YHM) to provide health support and education for members.

You might have seen the YHM Quarterly Packs, which contain posters and information, or have attended face to face presentations or undertaken health checks or utilised online platforms.

The Your Health Matters (YHM) program is providing free 20-minute face to face or online health checks to all of our members across the state.

The YHM program supports NSW RFS members in achieving and maintaining optimal health and fitness for their roles so they are able to provide world standard community-based fire and emergency services.

Some of the areas of health and wellbeing that the YHM program have focused on include, keeping hydrated, dealing with sleep issues, monitoring your sugar intake, recognising and coping

with stress, guides to sun safety and dealing with back, knee, neck and shoulder pain.

The focuses of the YHM Plan 2018–19, which you might have seen on myRFS, include healthy eating and support for catering brigades, increased communication of IMSAFER, and the Mental Health Plan 2018–2023.

Look out for the YHM Packs delivered to your Brigade and



other initiatives via our online platforms and MyRFS at <https://bit.ly/2KidQsR>.

Any questions or queries please contact our Wellbeing Specialist healthy@rfs.nsw.gov.au.

ROLLING WITH THE PUNCHES

8 TIPS TO HELP MANAGE STRESS

Published April, 2018

- 1. Take breaks from the stressors**
Whether it's a holiday, a walk out of the office or switching off the emails for an hour, it is essential we give ourselves time to recover from stress.
- 2. Keep things in perspective**
Even when facing very painful events, try to consider the stressful situation in a broader context and keep a long-term perspective. Try to avoid blowing the event out of proportion.
- 3. Move**
Humans are designed to be active. Movement stimulates the brain and body and is essential for good health. Getting active is energising and needs to be a part of every day.
- 4. Smile and laugh**
Our brains are interconnected with our emotions and facial expressions. Don't be afraid to smile or laugh as this can help relieve some of that tension and improve the situation.
- 5. Make space**
Spend some time away from technology. Create a technology free room in your house. Take time out in your favourite scenic spot.
- 6. Sleep**
7+ hours of sleep a night is essential for recovery. Non-pharmacological sleep therapy simply involves getting into a routine, getting up at the same time every day, and ensuring that your limbs cool off as bed time gets close. Letting your limbs cool off prepares your body for sleep, so make sure you don't exercise or have a hot bath close to bedtime.
- 7. Make connections**
Good relationships with close family members, friends or others are important. Accepting help and support from those who care about you and can listen to you strengthens your resilience.
- 8. Accept that change is a part of living**
Certain goals may no longer be attainable as a result of adverse situations. Accepting circumstances that can't be changed can help you focus on circumstances that you can alter.

WHAT IS STRESS?

Simply put anything that stops you from being relaxed, makes your blood boil, heart beat fast or gives you a fright.

NUMBERS YOU SHOULD KNOW

NSW RFS CISS and Chaplaincy 1800 049 933	Beyond Blue 1300 22 4636	Black Dog Institute 9382 4530	Lifeline 13 11 14	Sane Australia 1800 187 263
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NSW RURAL FIRE SERVICE

Content by **VITALITY WORKS**
wellness design studio

To find out more about Your Health Matters, log into MyRFS and go to www.myRFS.nsw.gov.au/InfoAbout/SafetyandWellfare/YourHealthMatters.aspx

SUGAR: THE BITTER TRUTH

Published April, 2018

The World Health Organisation recommends consuming less than*

6 TEASPOONS
Per day

On average, Australians eat*

20 TEASPOONS
Per day

OVER A LIFETIME THIS EQUALS

2.6 TONNE of SUGAR

(ABOUT THE WEIGHT OF A MALE HIPPO)

Nutrition Information

Serving Size: 12g	Servings Per Package: 20	NET 240g
Qty per Serving Qty per 100g		
Energy	1874J	15600J
Protein	0.2g	1.8g
Fat - Total	0.0g	0.0g
- Saturated	0.0g	0.0g
Carbohydrate	10.7g	89.4g
- Sugars	1.4g	9.8g
Sodium	47mg	391mg
Calcium	31.4mg	261mg
Phosphorus	9.3mg	77mg

Aim for 10g or less of sugar per 100g serving.

* Maximum intake of 12 teaspoons (50 grams) per day. Based on updated World Health Organisation guidelines released in March 2015 for adults and children to reduce their daily intake of free sugars to less than 10% of their total energy intake. A further reduction to below 5% or roughly 6 teaspoons (25 grams) per day would provide additional health benefits.

* Australian Bureau of Statistics 2012

NSW RURAL FIRE SERVICE

Content by **VITALITY WORKS**
wellness design studio

To find out more about Your Health Matters, log on to MyRFS and go to www.myRFS.nsw.gov.au/InfoAbout/SafetyandWellfare/YourHealthMatters.aspx



For the first time the Australian Community Engagement and Fire Awareness Conference was hosted at Coffs Harbour, in Region North. Almost 450 delegates attended, including members of external agencies such as FRNSW, VRA, NSW SES, Tasmania Fire Service, CFA, CFS, QFES and Fire and Emergency NZ.

The theme of this year's conference was "Our People, Our Community" with a focus on developing NSW RFS members and giving them the tools to engage with the communities they protect. The conference was focussed on identifying the complex factors that influence our communities' responses to bush fire, identifying those who are most at risk and creating initiatives that resonate with them more deeply to drive positive behavioural change.

We often see the signs of a resilient community when a major fire threatens. This resilience is in part a result of our volunteers keeping engaged with their communities to ensure they are prepared to face the inevitable fire when it comes.

This year's conference focussed on engaging with specific at-risk communities and saw the launch of the first research-led strategies for engaging indigenous, school and farming communities.

INDIGENOUS COMMUNITIES

The indigenous engagement strategy aims to deliver a program of activities and supporting resources that reduce the risk of fire and other emergencies on indigenous communities. These will be developed and implemented in collaboration and partnership

with indigenous people, elders, traditional owners, Local Aboriginal Land Councils, and NSW RFS members.

A number of attendees at ACEFA commented how welcoming it was feeling the presence of indigenous members across the entire conference. From the opening night when Uncle Mark Flanders addressed the delegates with a Welcome to Country and introduced the local Gumbaynggirr Mob who performed a smoking ceremony and spectacular

dances, to experiencing a cultural burn, to Mark Ella's address on the final afternoon of the conference (above right), indigenous leaders generously gave their time and knowledge. Indigenous fire practitioner and filmmaker Victor Steffensen from North Queensland (below) presented so that delegates could learn about the key features of cultural burning knowledge and the differences that distinguish it from the western understanding of fire.

Some delegates attended the cultural burn led by Darrunda

Wajaarr Rangers in Bruxner Park Flora Reserve and learnt about cool burn techniques and traditional practices.

SCHOOL COMMUNITIES

The NSW RFS recognise how important children are to starting and continuing the conversation about bush fire preparations and community resilience. The NSW Government has acknowledged this in the school curriculum; years 5 and 6 now must study the impact of bush fire on people,





places and the environment. The schools community engagement strategy aims to deliver a program of activities and supporting resources for school communities. These will be developed and implemented in collaboration and in partnership with teachers, students, education authorities, professional associations and NSW RFS members.

The Project Firestorm workshop at the conference gave members the opportunity to design Project Firestorm schools' engagement resources aligned to teacher and student requirements.

FARMING COMMUNITIES

Using local knowledge during rural fires is crucial to effectively fighting fires

and minimising their impact on farming communities. Assistant Commissioner Jason Heffernan introduced the Rural Liaison Officer (RLO) program that is designed to ensure farmers' voices are heard on firegrounds. David Curry, the RLO at the Barradine fires explained how and why this program works in practice. RLOs were deployed to numerous fires across the state this season and received positive feedback from the affected communities.

Farming communities are also very well connected, and experience high rates of volunteering; both are key indicators of community resilience. Empowering farming communities to identify how they can best develop their

preparedness and resilience is an effective approach to community engagement. The NSW RFS are partnered with the Foundation for Regional and Rural Renewal, the Office of Emergency Management and the University of Sydney to develop a new Get Ready Program that takes advantage and supports the unique strengths of each community and turns them into better preparedness outcomes.

As well as looking at engagement strategies with these three communities, there were sessions covering topics such as understanding risky behaviour in the community, the National Fire Danger Rating system, planning for spontaneous volunteers, and Lisa McLeod explaining the

Pappinbarra community's experience of bush fire and rebuilding.

With every major fire, there are opportunities to learn and improve and Josh Whittaker from the BNHCRC provided information from their research about the last fire season (which you can read about elsewhere in this issue of the *Bulletin*). In many respects the NSW RFS are leading the way, both in our research-led engagement strategies and our public awareness campaigns.

The conference also heard about the community's changing expectations for information during emergencies. People are more connected than ever, which brings both benefits and risks should those communications platforms fail. The importance of field liaison and people to people communications were discussed during sessions as well as the convening of a panel of Incident Controllers and Public Liaison Officers from the past fire season. This is a focus area for the service at the moment and lessons learnt will feature in updated training resources being released for next season.

Those who were able to attend the ACEFA conference and have the opportunity to expand knowledge and build networks will have found information and strategies to take back to their own brigade or unit that will help you create more meaningful and effective interactions with your community. ■



Public liaison critical during hazard reductions

Community consultation is an essential component of a successful hazard reduction.

By Adam Streichler, Senior Operational Communications Officer



Before the Jessica Gardens Hazard Reduction (HR) operation took place, the Hornsby/Ku-ring-gai Rural Fire Brigade communicated with local schools and aged care facilities, and undertook a social media campaign to ensure that residents were aware of the upcoming operations. During

the HR, Channel 9 visited the fire ground and reported on how crucial HR burns are for protecting the community and also featured the large joint operation between all agencies involved in the HR burn.

On Saturday 26 May 2018, Hornsby / Ku-ring-gai and

Northern Beaches Rural Fire Districts, in association with Fire & Rescue NSW and the National Parks and Wildlife Service came together to undertake a 109ha hazard reduction in St Ives.

The Jessica Gardens Hazard Reduction was critical to providing protection to over 220 properties as well as to essential electricity and road infrastructure. The HR included a large community interface and bushland adjacent to Mona Vale Road, so it was essential that a public liaison function was included in the Incident Management Team structure.

Senior Deputy Captain Adam Streichler of Westleigh Brigade was appointed Public Liaison Officer, reporting directly to the Incident Controller, and coordinating the community and media liaison functions across the fire ground.

"A Public Liaison Plan for the burn was established prior to the day, which highlighted community assets, potential locations for static information points and resource requirements and we implemented that, alongside Community Field Liaison Officers who were mobile across the HR throughout the day," Adam said.

"It was essential that the community supported the efforts of our crews to undertake this important hazard reduction, sometimes the only way to firm up their support is to be visible and available to the community during these large interface burns.

"In establishing a community liaison team, particularly for a hazard reduction where there are legitimate community concerns relating to the protection of the environment, smoke impact and other factors, the liaison officers need to be outgoing, willing to answer the tough questions and most importantly be a positive representative of the Service" he said.

"National Parks were undertaking the Sphinx Hazard Reduction in North Turramurra on the same day [as the Jessica Gardens HR],

which increased the amount of smoke in the air and this caused an increase in the need to ensure a strong community engagement presence," said Inspector Rolf Poole, District Coordinator for Hornsby / Ku-ring-gai Rural Fire District.

"It was essential for Adam and his team on the day to be visible, engaging and open to all dialogue with the community, particularly because of the increased activity with two HRs occurring in close proximity. The team found that the community were incredibly positive and supportive of our efforts and further appreciated the opportunity to stop and talk with dedicated community liaisons," Inspector Poole said.

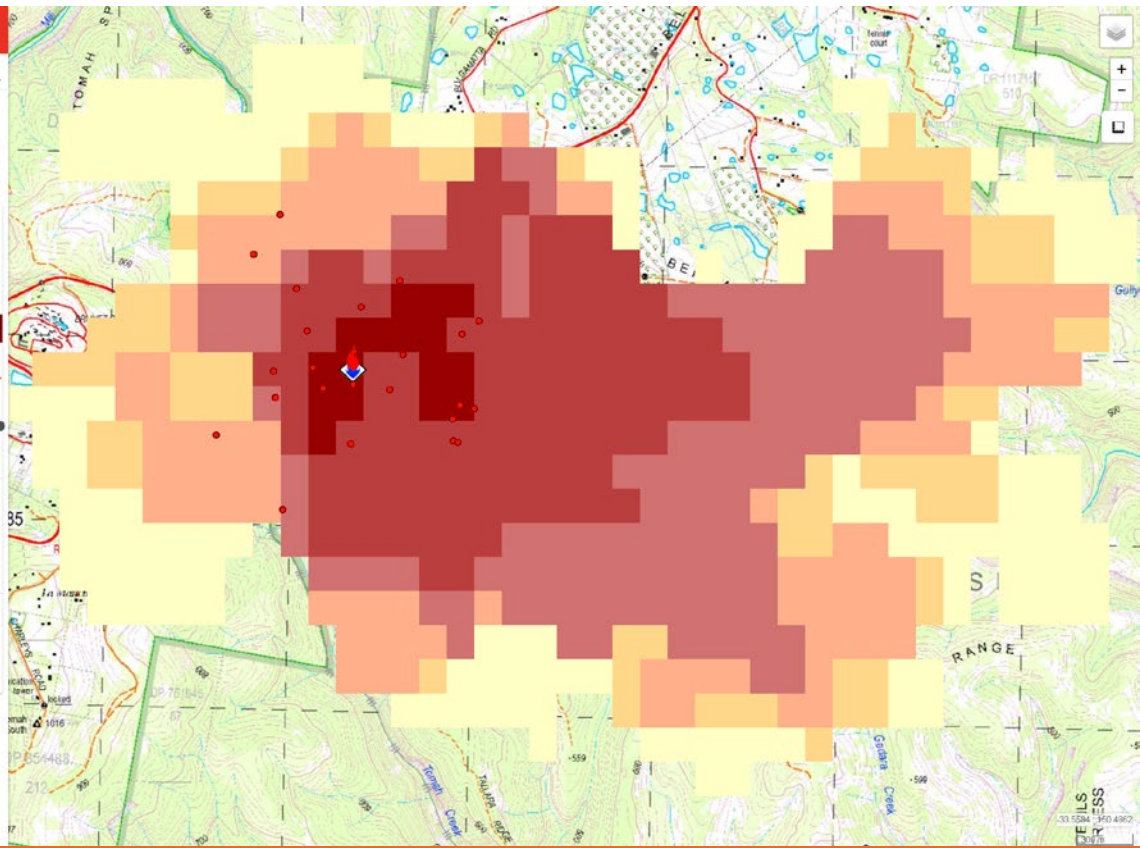
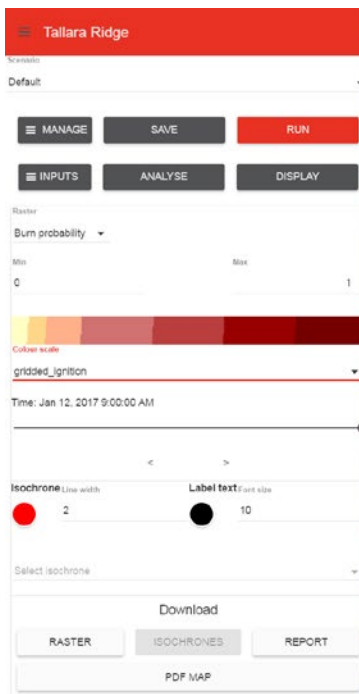
In hazard reductions, as well as community liaison, there is planning around environmental issues as well. For example, prior to a burn at St Ives recently the public wants to know that the HR will be managed in accordance with environmental guidelines.

An environmental assessment is one of the first steps in the planning process for prescribed burns. NSW RFS works closely with other agencies and land managers prior to burning to ensure the environmental matters are taken into account. Prior to a recent burn at St Ives a number of monitored possum boxes were relocated before the start of the burn and were returned at a later date. Indigenous heritage sites were identified and protected. Creek line riparian vegetation zones were excluded from burning. Low to moderate burning techniques were employed to facilitate a patchy mosaic burn, providing fauna with corridors so they could relocate. Prescribed burning operations take months of planning and we thank the community for doing its part.

Hornsby / Ku-ring-gai District hope to include the public liaison function for all large hazard reductions in future due to the success of recent efforts and feedback from the community. ■



Above: Public liaison is crucial when hazard reduction activities occur close to built up areas and infrastructure.



Technology for predicting

The Fire Behaviour Analysis unit has been using two new technologies over the past fire season to improve the monitoring and forecasting of going fires.

The first is imagery from the Himawari-8 satellite. Operational since 2015, this new generation weather satellite gathers images of the entire continent every ten minutes, compared to hourly images for the previous satellite. Himawari-8 is operated by the Japan Meteorological Agency. Data is provided to the NSW Rural Fire Service (RFS) via the Bureau of Meteorology just 15 minutes after collection, allowing near-real time monitoring of fires and smoke columns.

The NSW RFS make use of two kinds of images. The first are visible light images, like a lower resolution aerial photograph with 1 km pixels, which allow us to track smoke plumes from bush fires and prescribed burns, as well as tracking the movement of storms and cold fronts. The second are the so-called "fire band" images which are sensitive to heat released by things such as

fires or hot ground. For large fires, enough heat is released to make the location of the fire glow brightly in the satellite images. The pixels of these images are relatively large, 2 x 2 km, but fires smaller than this can be seen as the heat they release can raise the temperature of the pixel above that of the surrounding pixels.

Fire band images are useful for locating fires and monitoring their behaviour. For remote fires it has often been possible to locate fires that are distant from tracks or land marks by their signature in the satellite image. For major fires the images have been used to track the intensity of fires as they escalate and moderate during the course of the day, or to track the effect of a wind change as it moves across the fire ground.

There are of course some limitations too. The large pixel size means that some small

fires are not visible, particularly surface fires in forests. There is also a tendency for the smoke column to glow in the images, exaggerating the size of a fire. Finally, hot ground in the western parts of the state can often reach temperatures that make it appear as though the whole state is on fire, with the fire signal lost in the background heat.

The NSW RFS is working with university partners at the Bushfire and Natural Hazards Cooperative Research Centre to develop methods to improve the information we get from the Himawari-8 images, including reducing the fire detection resolution to 500 metres and better distinguishing hot ground from going fires.

Ensemble fire prediction

To better understand the potential for new fires to spread, the Fire Behaviour

Analysis unit has started using ensemble predictions of fire behaviour. Rather than trying to make a best estimate of fire spread, an ensemble takes a large number (typically 25-100) of predictions and combines them together to estimate where a fire is mostly likely to spread but also where it might spread given the right conditions. Each prediction within the ensemble differs slightly from all the others in terms of the fire location, the weather forecast used, and the fuels burned, to take into account the fact that there are always uncertainties about these important inputs into the fire spread prediction.

Because many individual predictions are required for an ensemble, this method is used only for computer simulations made using the Phoenix fire simulator.

The Phoenix fire prediction tool works by analysing relevant data such as point of fire ignition, weather conditions, topography and start time to make predictions of fire spread.

It also takes into account moisture content, fuel load and vegetation types drawn from state-wide fuel maps. Phoenix also predicts flying embers which can start spot fires ahead of fire fronts.

As soon as a fire incident is reported, a quick ensemble prediction for the next 24 hours is made and displayed in a web page for the Supervisor

Fire Behaviour Analysis, usually within five minutes of the fire being logged. This allows a quick appraisal of the potential of the fire and assists the Supervisor to triage incidents and assign them to Fire Behaviour Analysts for more in-depth predictions. With manual predictions taking around an hour to complete, and dozens of fires starting on a busy day, triage is vital.

Over the past fire season over 500,000 automated predictions were made.

The Fire Behaviour Analysis unit can also make ensemble predictions for use by Incident Management Teams, which are provided with interpretation of probabilistic outputs. These include “gridded ignitions” which vary the location of the fire when its location is not

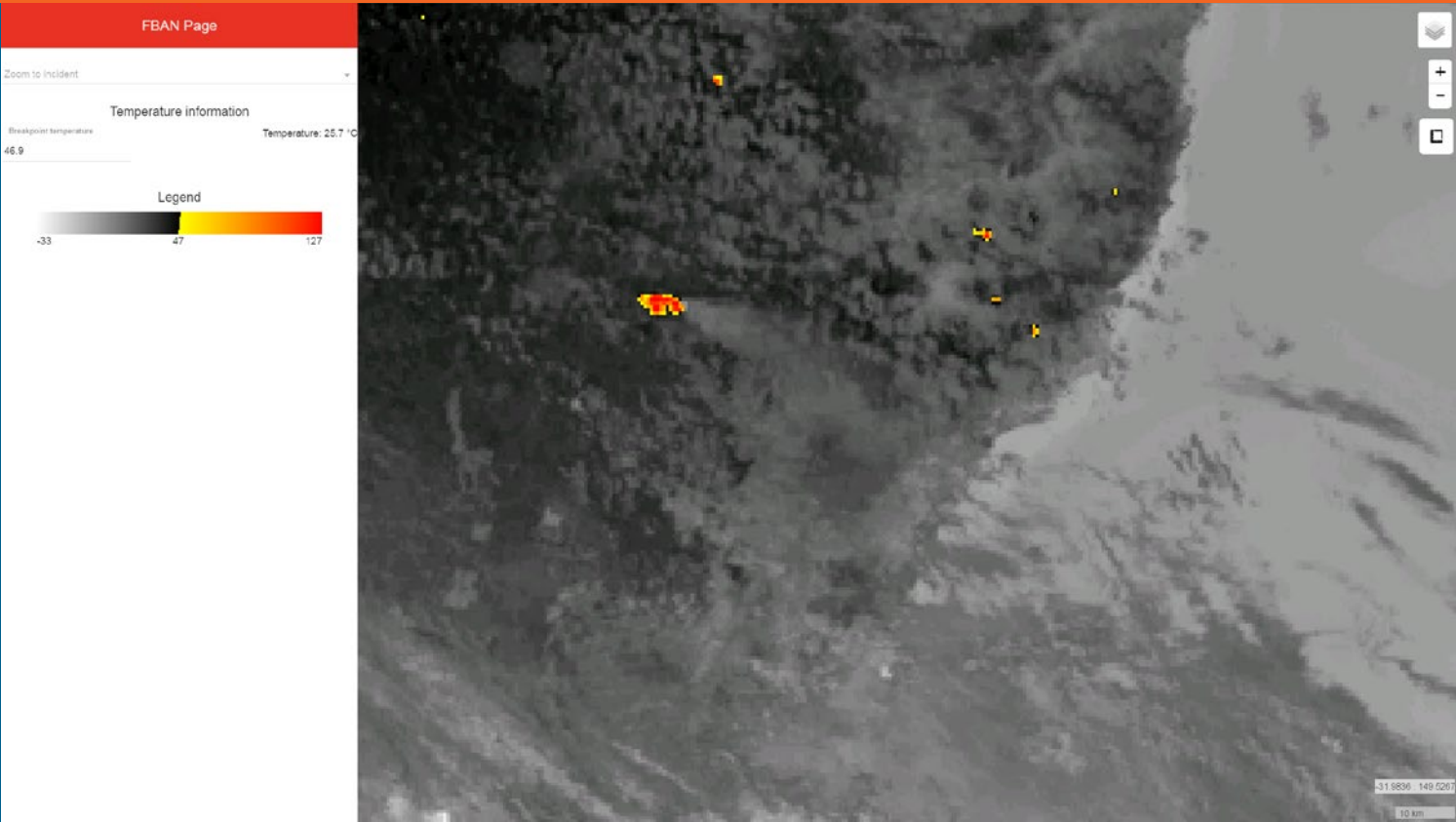
known exactly, or “breakout scenarios” used when a fire which is behind containment lines has the potential to spot out of control but the location of the breakout can only be anticipated approximately.

Please contact the Fire Behaviour Analysis team if you’d like more information on fire prediction products for Incident Management Teams. ■

Below: A Himawari-8 fire band image of NSW showing areas of active fire, coloured yellow and red. Cooler cloud tops and smoke plumes show up as light-grey. **Left:** The result of an ensemble fire prediction for a newly reported fire. Red areas are predicted to burn in all simulations while orange and yellow areas are less likely to burn. The prediction does not take into account suppression efforts. Screenshots supplied by Stuart Matthews.

fire behaviour

By Stuart Matthews,
Senior Fire Behaviour Analyst





Research gives insight into community bushfire response

By Dr Josh Whittaker, Bushfire and Natural Hazards CRC and the University of Wollongong and Dr Mel Taylor, Bushfire and Natural Hazards CRC and Macquarie University.

In January and February 2017, New South Wales faced some of the worst bushfire conditions ever forecast for the state, including Catastrophic fire danger ratings for many communities.

During this time, a number of large and damaging fires occurred, but fortunately no human lives were lost during the worst of the conditions.

Following the fires, the New South Wales Rural Fire Service (NSW RFS) commissioned the Bushfire and Natural Hazards CRC (BNHCRC) to conduct research into community preparedness and the responses by affected communities.

The research involved interviews with people affected by the Currandooley, Sir Ivan and Carwoola fires, and an online survey of residents in bushfire risk areas throughout NSW.

THE FIRES

The Currandooley fire was caused by a bird making contact with a high voltage powerline and landing in dry grass. Under Severe fire danger conditions, the fire destroyed a house, sheds and two vehicles. Around 200 sheep and cattle were lost.

The Sir Ivan fire ignited from lightning strikes near Leadville, and burnt under Catastrophic fire danger conditions, destroying 35 houses, over 50,000 hectares of land and many agricultural assets such as livestock, fences, pasture and machinery.

The Carwoola fire destroyed 11 houses around 20km south east of Canberra. It was caused by sparks coming from a metal cutting wheel, and burnt under Severe fire danger conditions.

The research involved interviews (113) with affected residents, and an online survey completed by 549 people threatened or affected by bushfires throughout NSW in 2017.

WHAT THE RESEARCH FOUND

Information and warnings

A majority of survey respondents found warnings easy to understand, up-to-date and useful.

Participants expressed a preference for highly localised information. Survey respondents most often identified the “Fires Near Me” smartphone application and website as their most useful information source.

“Fires Near Me” was seen as easy to understand (88 per cent), useful (82 per cent) and sufficiently localised (76 per cent). Two-thirds felt the information was up-to-date. Interviewees commonly expressed strong support and a high degree of satisfaction with the “Fires Near Me”.

Landline telephone warnings were more often seen as useful when compared to SMS warnings, (78 and 67 per cent), up to date (72 and 66 per cent) and timely (68 and 66 per cent). Nevertheless, survey respondents most

often identified SMS as their preferred mode for delivery of warnings. Limited mobile phone coverage, particularly in the Sir Ivan and Currandooley fires, meant that some people did not receive SMS warnings.

Catastrophic Fire Danger warnings

After the 2009 Black Saturday fires in Victoria, the fire danger warnings were revised nationally and "Catastrophic" was introduced as the highest level of fire danger. This was only the second time large population centres in NSW had been subject to Catastrophic fire danger ratings since their introduction.

Eighty-eight per cent of survey respondents considered Catastrophic fire danger warnings to be easy to understand, 83 per cent found them timely and 78 per cent found them useful. The research shows that some people may underestimate the risks to life and property if the fire danger is not Catastrophic.

Receipt of an official warning about Catastrophic fire danger prompted survey respondents to discuss the threat with family, friends or neighbours (63 per cent) and look for information about bushfires in their area (62 per cent).

Equal proportions began preparing to defend or leave (39 per cent) and a smaller proportion (12 per cent) left for a place of safety.

When asked what they would do next time they received a message about Catastrophic fire danger, 12 per cent of survey respondents said they would leave before there is a fire and 24 per cent said they would wait until a fire started, then leave. Twenty-seven per cent reported that they would get ready to stay and defend, while nearly a quarter said they would wait for a fire before deciding what to do.

Interviews with people affected by the Carwoola and Currandooley fires suggest that some people underappreciate the risks to life and property on days that are not Catastrophic.

In contrast, some interviewees affected by the Sir Ivan fire did not anticipate the size or severity of the fire, despite forewarning of the Catastrophic fire danger they would experience. Many felt that they were prepared to respond to smaller fires, which were more common in the area.

Public expectations of fire services

It is generally well understood that there are resource constraints during major fires (e.g. "there are not enough fire trucks for every property"). However, there is less appreciation of the operational constraints of large and dangerous fires, and that often it can be too dangerous for firefighters to directly attack the fire front.

Most interviewees affected by the Currandooley and Carwoola fires praised the efforts of firefighters and did not expect to receive personal firefighting support. Residents in Carwoola were particularly cognisant of the limits of support from fire agencies, a message that had been clearly communicated by the local brigade over time.

Some interviewees affected by the Sir Ivan fire were more critical of the firefighting response. Criticisms were varied but centred on the perceived lack of firefighting in the agricultural lands between Leadville and Cassilis.

Some saw the fire service as overly bureaucratic and risk averse. These criticisms reflect a mismatch in expectations and should be viewed in the context of a large, destructive bushfire that burnt under Catastrophic conditions, where there was limited operational capacity or opportunity to deal with such fires due to dangerous conditions.

Conclusion

This research is now being used by the NSW RFS to put in place new processes to better liaise with communities during major fire events, as well as to further strengthen its approach to public information through websites, smartphone applications and face-to-face communication.

The research confirms the tendency for people to wait and observe the fire directly

before getting ready to defend themselves or confirm the need to leave. This behaviour presents opportunities for emergency service personnel to meet people at a time when they are seeking and receptive to information and advice.

While there is strong appreciation for the danger of fires under Catastrophic conditions, there is a need to more clearly communicate the risks posed by fires burning under non-Catastrophic conditions. Such messages could be incorporated into community education and engagement resources, as well as emergency warnings and information.

There is a need to more clearly communicate the limits to response capacity. In addition to limitations due to resource constraints, which are generally well-understood by the public, there is potential for enhanced communication about the dangers large and fast-moving fires pose to firefighters and that it can be too dangerous for direct attack on the fire front.

Find out more about this research at: bnhcr.com.au/publications/2017nswbushfires

Left: The aftermath of the Sir Ivan fire in February 2017.

Bottom: An aerial shot of the Sir Ivan bush fire.



Choosing the right message to keep people safe

The way the NSW RFS educates and engages the community on fire safety has changed over the years to a modern, research-based approach of raising awareness and changing behaviour.

The NSW RFS has seen the value in public awareness campaigns for many decades – even from the days of the Bush Fire Council. Over the past century, fire safety messages featured characters like Smoky the Koala and war-time messages of defending the nation from the threat of fire.

Today, fire safety campaigns have become more sophisticated and targeted – moving from general messages about the general risk of fire across the landscape, to using

research and the insights from people who have lived through bush fires.

The NSW RFS commenced its first significant and modern public awareness campaign in 2009, following the Black Saturday bush fires in Victoria. With the introduction of new bush fire danger ratings, alert levels, and the development of the new Bush Fire Survival Plan, there was a need to quickly communicate these changes to the community. It started a new approach to

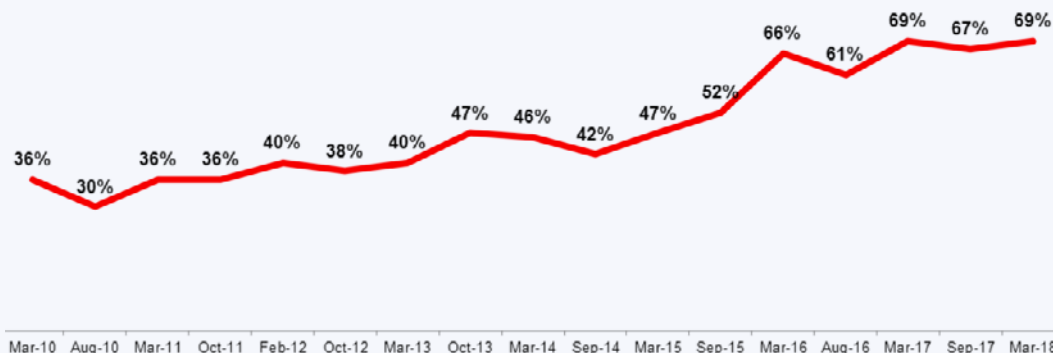
advertising by the Service, which has seen a huge shift in the levels of planning and preparation in the community.

Research at the end of the campaign found that while the majority of people knew they should have a bush fire plan, most would put it off, thinking a fire wouldn't happen to them. It was from this insight that the "Planning to make a plan is not a plan" campaign was developed. The campaign commenced in 2012.

Then, following the fires of 2013, research was conducted in areas like the Blue Mountains, Southern Highlands, Coonabarabran and Port Stephens. One of the key highlights of this research was that while people appreciated the risk of fire to the area in which they lived, they didn't personalise the risk of fire. Through the personalisation of fire, the "I Am Fire" campaign was developed.

Now, the campaign has concluded – and since the





Left: Graph showing overall percentage of increase of number of people with a Bush Fire Survival Plan in place since March 2010.

Bottom: Advertising posters over the last century.

inception of targeted public awareness campaigns over the past decade, people's level of bush fire planning has risen from around 30 percent in 2010 to 69 percent in early 2018.

"We've now hit a turning point in the way we communicate fire risk to the community," explains Anthony Clark, Director of Corporate Communications.

"A decade ago, if you had thought about what to do during a fire, you were in the

minority – now, you're in the minority if you haven't planned.

"However, we know the job isn't done yet. We know that if you scratch the surface, people often haven't thought through their plan properly, such as when they'll leave, what they'll take, or what they'll do with animals. That's the big focus moving forward".

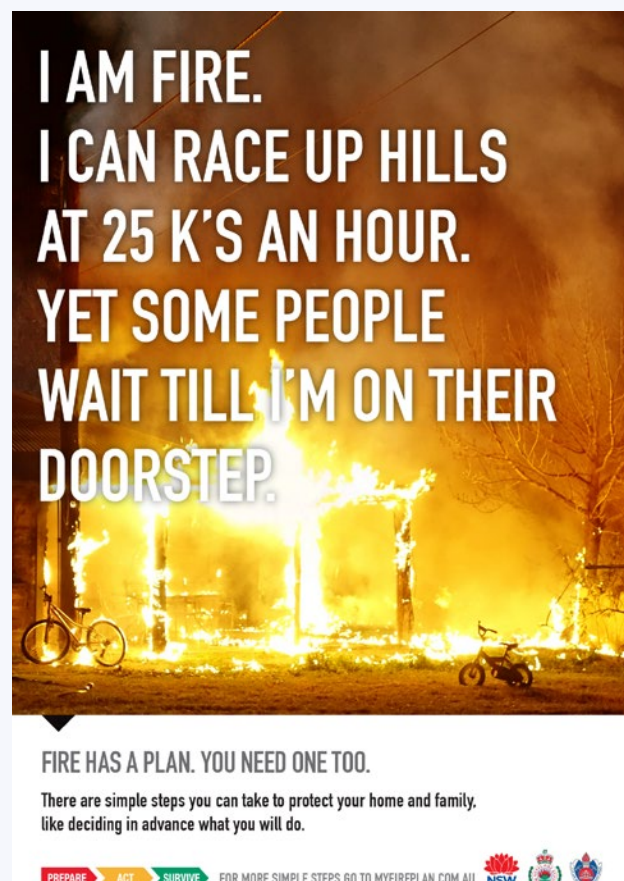
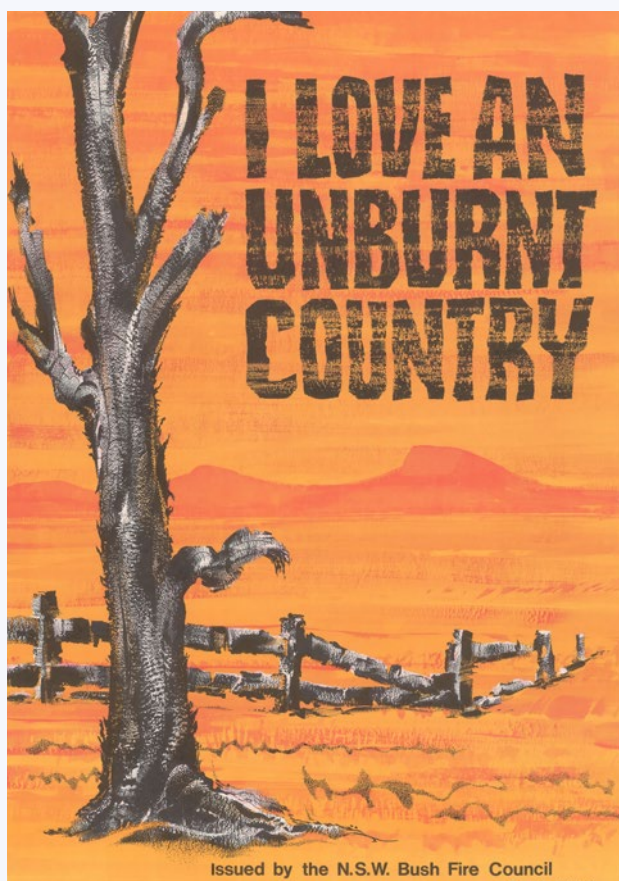
A new campaign is in development for the 2018–19 fire season and beyond, focusing on the concept

of improving the quality of people's planning and preparation.

"If the majority of people have at least thought about what to do, let's get them to question whether they've really thought it through".

From September, you can expect to see the new campaign on television, social media, in newspapers, on radio and outdoors – asking the question "How Fireproof Is Your Plan?".

The campaign will be supported by specialist community engagement tools, including an updated MyFirePlan.com.au website, and will tie in with this year's Get Ready Weekend on 22 and 23 September.



At your service...



In the centre of the NSW Rural Fire Service headquarters sits our very own library, which holds over 10,000 books, reports, DVDs and journals, and all are available for you to use. The library is staffed by a full-time librarian who builds and maintains the library collection and is there to assist you with your library queries.

The collection has grown over the years from focusing on our bush fire history, training resources and incidents to now providing members with a broad range of resources. There is material readily available on mental health and physical wellbeing, leadership and management, ecology and meteorology, mapping, adult education and emergency management.

As a member of the NSW RFS, you can borrow from the library free of charge. The library pays the postage, and includes reply paid envelopes, to send books or articles across the country to meet the loan requests from our members. Each month the library loans out on average 65 books and provides even more journal articles.

WHO USES THE LIBRARY?

Our number of users have grown as well. We now have over 2,000 registered borrowers. NSW RFS members are not our only library users. More and more people are learning about the library and we actively promote it to the public. The library now receives requests externally from both individuals and organisations, such as government departments, education centres ranging from universities, secondary schools, primary schools right through to childcare centres. The librarian is regularly contacted by researchers working with emergency services nationally and internationally, and members of the public interested in bush fire information.

Some requests are straight forward, but others require our librarian to research across numerous sources to provide reference material to answer users' queries. In the last year the library had over 3,000 requests for information including topics such as: the effects of smoke on agricultural businesses; decision making under stress; emergency services exercise planning; office and building design; weather and climate change; and national and international fire incidents. The library also helps with information for brigades who are celebrating anniversaries.

THE NSW RFS LIBRARY ONLINE

Increasingly, people look for and read information online and the library has adapted to this with

subscriptions to online journals, digital magazines and eBooks. However, physical books are still very popular and our collection of books is growing. To assist users to get information easily, the library built a new website in 2014. The website is accessible to the public, so there is no need to log on to MyRFS to use it. The website is a one-stop site for finding items in our online catalogue, requesting loans, looking at online magazines and keeping up to date on what's new to borrow in the library. On the website you will also find links to useful websites for topics such as inquiries and coronial inquests, fire and emergency sites, and the NCC Construction Codes, among others.

The library website is <http://nswrfs.intersearch.com.au/>

The NSW RFS library



THE BUSH FIRE BULLETIN ON TROVE AND "LIBRARIES AUSTRALIA"

An exciting initiative occurred in 2016 when the National Library of Australia digitised the entire collection of the NSW RFS magazine, the *Bush Fire Bulletin*, which has been published since 1952. It is one of the first complete journals the National Library has chosen to digitise and it allows anyone in the world to access our journal articles online through TROVE. The library website also provides a portal to search the *Bush Fire Bulletin* on TROVE so you can delve through the contents of over 60 years of our *Bush Fire Bulletin*.

You can also access TROVE through the National Library of Australia's website by visiting <http://nla.gov.au>

The NSW RFS library is working on another major project to share our resources by entering our collection records into the "Libraries Australia" database. Once

this is done, all libraries across Australia will be able to view what is held in the NSW RFS Library collection. The NSW RFS collection is unique, and is considered the largest collection of bush fire resources internationally, so each item is being entered into the database individually.

EBOOKS AND DIGITAL MAGAZINES

The library has two online collections that are available for members to use. Our eBook collection is small but growing. It focuses on the same subjects as our hardcopy collection; in fact many of our eBooks are also available to borrow as hardcopy books – you decide which format you prefer. Popular titles in our eBook collection include Stephen Pyne's *Burning Bush: A Fire History of Australia*; the latest edition of *Essential Bushfire Safety Tips*; *Flammable Australia* published by CSIRO; our most borrowed book *Incident Management in*

Australasia; and the text book *Kirk's Fire Investigation*. We also have eBooks that don't focus on fire. These include *Managing Projects*, *Emotional Intelligence 2.0*, *Professional Writing* and Michael Mosley's bestsellers *The Fast Diet* and *Fast Exercise*.

Our digital magazines subscription to "Flipster", as part of our health and safety initiative, gives access for all members to five magazines online – *Good Health*, *Men's Fitness*, *Women's Health & Fitness*, *Popular Science* and *Australian Geographic*. In the last 12 months, NSW RFS members used the collection over 1,600 times to read the magazines.

It is easy to get access to these online collections; simply email or phone the library and we will send you a password-embedded link to use on your computer.

Because certain topics in our library are asked for regularly, the librarian has compiled online lists to make it easy for

our members to find relevant titles. These lists are found near the top of the library website, and include:

- health and fitness collection
- women and success
- writing reports and business documents
- learning and development

WOULD YOU LIKE TO USE THE LIBRARY?

It is easy to become a member of the library, and once you have joined, books and DVDs can be sent directly to your nominated postal address for a one-month loan.

If no one else has requested the item, and you'd like to use it a little longer, the loan can be renewed.

A reply paid return address label is included with the books or, to save on postage, you can repackage the items and return them to your nearest district office for them to post back to the library.

We'd love to welcome you as a member of our library. ■

New infrastructure out west

The NSW RFS is proud of the state-wide infrastructure program that provides the facilities that enable our brigades to do work to keep their communities safe.

Eighty-three percent of the NSW RFS's allocated infrastructure funds are spent outside the Sydney basin. Since 2012-13 across Region West more than \$28million has been invested into building projects improving the infrastructure available to our members.

In the Canobolas zone alone, there have been 34 new projects: 21 new buildings and 13 extensions where a meeting room, toilet facilities and a kitchenette have been added to an existing station.

There were 20 new standard design stations and a new State Mitigation shed. New stations already opened are: Barryrennie, Merriganowry, March, Borenore, Byng/Emu Swamp, Springside, Cudal, State Mitigation Shed in Orange, Red Hill, Wattamondara, Chaucer,

Mandurama, Spring Hill. And, in various stages of completion are Clifton Grove, Lidster, Moorbel, Wyangala, North Bangaroo, Cumnock, Milburn Creek and Cumnock.

As well as providing much needed facilities to our members, this construction is an enormous boost to local economies.

Canobolas Zone has an excellent relationship with the local councils of Blayney, Orange, Cabonne and Cowra and by agreement, engaged an external project coordinator to manage the process. Utilising local contractors from the Central West to undertake the works in accordance with the councils' procurement policies, the outcome was the delivery of a series of outstanding facilities for our volunteers.



We are also achieving cost savings that allow a 3B Station to be built for approximately \$260,000 and a 2B Station for \$240,000. This has allowed us to upgrade twice as many brigades from the available budget allocation.

A further 13 brigades had extensions in facilities to include meeting rooms, kitchenettes and toilets.

While these extensions don't usually come with the fanfare of a new station opening, additional facilities, however modest, can play a large role in a local community. Sometimes the greatest impact to communities can come with increasing the amenities of a small brigade shed, so that a brigade can provide food from a small kitchenette and provide bathroom facilities at their meetings and welcome new members or conduct their training and brigade business in comfort.

These 13 brigades are: Mullion Creek, North West, Rivers, Mount McDonald, Gooloogong, Kangaroo Flat, Lyndhurst, The Ponds, Kings Plains, Billimari, Neville and, in progress, are Wallis Islands and Yeoval.

Superintendent David Hoadley of the Canobolas zone said "When we upgrade facilities it brings out more enthusiasm from volunteers towards the brigade – for example when Springside opened, membership increased by 24, which is a significant boost". ■





Australian Fire Service Medals 2018

The Australian Fire Service Medal (AFSM) is awarded for distinguished service by a member of an Australian fire service. The AFSM was introduced in 1988 and replaced the Imperial awards of the Queen's Fire Service Medal for Gallantry and Queen's Fire Service Medal for Distinguished Service. Congratulations to the thirteen AFSMs that have been awarded in 2018 for the Australia Day and Queen's Birthday honours announcements. You can read the full citations on the NSW RFS website:

<https://www.rfs.nsw.gov.au/news-and-media/general-news/australia-day-2018-australian-fire-service-medals>

AUSTRALIA DAY 2018 AFSMs

CAPTAIN NEAL COOMBES

**North West Zone,
Region West**

Captain Neal Coombes joined the Coonamble Headquarters Brigade on 18 December 1986, has served as the brigade Deputy Captain from 2003 to 2005, and in 2005 he was elected Senior Deputy Captain. He has also held other roles with the Coonamble Headquarters brigade including the role of Training Officer and President and assisted with Coonamble FCC regularly. In 2011 Neal was made a Life Member due to his tireless dedication to the brigade and was Group Captain for the North West Zone 2006 to 2015.



FIREFIGHTER DAVID ROBERT CORDERY

Hornsby - Region East

Firefighter David Robert Cordery has been a member of the Rural Fire Service for 60 years. His primary brigade has been Ku-ring-gai. He was a dual member, first with Belrose, then with Hornsby/Ku-ring-gai Support Brigade. David was an active contributor to the shaping of the Ku-ring-gai Brigade structure and culture. He has held numerous roles including Captain, President for 16 years, Senior Deputy Captain, Deputy Captain and Secretary. David was one of the primary leaders of the brigade that have guided its evolution from its community origin in to the professionally trained brigade of today.



GROUP CAPTAIN MARK CHARLES HOSKINSON

**Bland/Temora,
Region West**

Group Officer Mark Hoskinson joined the Kikoira Brigade in July 1979 and has demonstrated his leadership as Deputy Captain, Captain, Deputy Group Captain and Group Captain.

Mark manages local and out of area crews, aircraft, heavy plant and provides timely reliable information to the Incident Management Team. Mark has excellent leadership skills and continually demonstrates his professionalism, resilience and commitment to the Service by representing volunteers on the Senior Management Team and the Bland Temora Zone Bushfire Management Committee and by attending Senior Management Team meetings, Group Captain/Captains forums, annual group equipment inspections, brigade annual general meetings, pre and post season Captain's meetings and after action review debriefings.



**FIREFIGHTER AND INSPECTOR
MARK CHRISTOPHER MURPHY**
**Liverpool Range,
Region North**

Inspector and Firefighter Mark Murphy officially joined the Gaspard Brigade (now part of Wallabadah District Brigade) in 1973 and was Captain of Gaspard from 1989–1995. He was Fire Control Officer with the Quirindi Bush Fire District and today holds the position of Deputy Fire Control Officer (and 2IC) for the Liverpool Range Zone.

Mark donates hundreds of hours training volunteers in all aspects of firefighting as well as spending equivalent hours around the state and interstate in various Incident Management roles. He continues to foster a close working relationship between RFS staff, volunteers and other agencies with his continued support of the Liverpool Range Bush Fire Management Committee, Local Emergency Management Committees and NSW RFS/ RFSA Consultative Committees.



**GROUP CAPTAIN
PAUL JAMES REARDON**
**South West Slopes Zone,
Region West**

Group Captain Paul Reardon has been an active member of the NSW Rural Fire Service for 54 years since joining the Bungendore Brigade in 1963.

Paul has been Group Captain for the past 14 years within the South West Slopes Zone at Boorowa and as Deputy Group Captain for the previous six years.

Paul has worked in supervisory roles at numerous fires within the South West Slopes and has undertaken leadership roles at out of area incidents.

Paul has played a leadership role in the development of the South West Slopes Pre-Incident Plan and has focused on building strong relationships between Local Government and the NSW Rural Fire Service while always encouraging the best outcome for volunteer members.



**SENIOR DEPUTY CAPTAIN
RONALD SMITH**
Mid Coast, Region East

Deputy Captain Ronald (Ron) Smith joined the Oakville Bushfire Brigade in 1956.

The fire station was situated on the Smith family farm and the fire appliances were a farm truck which carried a 1,000-gallon tank and a Model T Ford which carried knapsacks. He was a member of the Windsor Civil Defence (now SES) during the 1960s, in particular with the boat rescue crews.

In 1976 Ron joined the Kenthurst Brigade and served as Deputy Captain 1980–1983 and 1990–1992, Senior Deputy Captain 1983–1986, Captain 1986–1990, and President 1997–2000. In 1992 he was elected Deputy Group Captain.

Though Ron retired from active service with the Kenthurst Brigade in 2003 and moved to Hallidays Point, he joined the Diamond Beach Brigade and is currently a Deputy Captain.

He was Deputy Group Captain for the Taree Manning Valley District 2007–2016. Ron has dedicated many years to the NSW Rural Fire Service.



**GROUP CAPTAIN
PETER JAMES WYKES**
Orana, Region West

Group Officer Peter James Wykes joined the Euchareena Brigade in 1976 and has completed just over 41 years of service.

He held the position of Senior Deputy until October 2000 when he was elected Deputy Group Captain for the Southern district of Wellington Council area.

In 2009 and again in 2014 Peter was elected as a Group Captain in the Orana Team, a position he still holds. He has had many appointments as the Divisional Commander on large fires and Section 44 incidents.



The Australian Fire Service Medal (AFSM)

is a circular copper-nickel medal. It is ensigned with the Crown of St Edward. The obverse displays an image of the Queen superimposed over a seven-pointed star of flames. The reverse is inscribed with the words 'Australian Fire Service Medal', and 'For Distinguished Service' on a background of flames.

QUEEN'S BIRTHDAY 2018 AFSMS



GROUP CAPTAIN GEOFFREY ANDREW

Burra Rural Fire Brigade, Burra

Mr Andrew joined the Burra Rural Fire Brigade in 1976 and has remained an active member of the brigade. Holding various positions from 1996, including Group Captain and Deputy Group Captain, he has demonstrated leadership during firefighting operations, training, support for administration of brigades, asset maintenance and leading strike teams. He has also spent many hours in-flight providing fire intelligence to station operations and the local fire control centres.

As a Group Captain, Mr Andrew has been a long-term member of the local senior management team and has also given valuable input and advice as a member of the State Consultative Committee on engineering matters and has served on the Rural Fire Service Association.



GREGORY INGERSOLE OAM Englinton Brigade, Englinton

After joining the Englinton Brigade in 1977, Mr Ingersole fulfilled numerous roles including Group Officer, Chainsaw Operator, Instructor/Assessor and Fire Investigator. He has been Senior Deputy Captain for many years. He has enjoyed many hours restoring a 1920s Dennis fire engine which now holds pride of place at the Englinton Station and is used at many community events around the Bathurst district. He designed and built the Chifley Community Engagement trailer and other displays. He has also built a hot fire trailer, the first of its kind in NSW, which is used regularly for training. He was the founding member of the Chifley Cadet Program and the then Bathurst Regional Training Committee and is currently the Chair of the combined Chifley/Lithgow Training Committee.



GROUP CAPTAIN ERIC SHANKS, Terramungamine Brigade, Dubbo

Mr Shanks joined the Terramungamine Brigade in 1965 and during his period of service with the brigade he has served as Captain (for 24 years), Deputy Captain, Permit Officer and President. Since 2009 he has been Group Captain and has managed many major incidents. He is well respected by volunteers and members of the community and as a member of the Senior Management Team he provides valuable input on management and development across the team.



SENIOR DEPUTY CAPTAIN MARTIN HARRISON

Coonamble Headquarters Brigade, Coonamble

Mr Harrison joined the Coonamble Headquarters Brigade in 1996 and served as Deputy Captain 2009–2013 and Senior Deputy Captain since August 2013. He is a current member of the North West Zone District Training Team. He has regularly participated in out of area and interstate deployments. His contributions are many including assisting with the annual Roads and Maritime Service appliance inspections for the Coonamble Shire and myriad roles at the Fire Control Centre and with the organisation and running of Zone exercises. Mr Harrison's dedication and level of commitment to his local community reflects the values and standards of the NSW RFS.



GROUP CAPTAIN NEALE MUTTON Bolwarra-Largs Brigade, Bolwarra

Mr Mutton has provided distinguished service to the NSW Rural Fire Service for over 40 years since joining the Bolwarra-Largs brigade as a volunteer fire fighter in 1977. Between June 1982 and June 1994 he was Captain and has also held the positions of Deputy Captain, Permit Officer and Brigade Training Officer.

From 1995–2001 he undertook the position of Honorary Deputy Fire Control Officer for the Maitland Fire Control Centre, then continued in the same role in a temporary capacity until 2003. In 2003 he was elected as Deputy Group Captain, then, in 2004, Group Captain, a position he still holds in the Lower Hunter Zone.

His experience and calm manner on the fire ground have seen him lead many strike teams and within the Lower Hunter Zone he has been the divisional commander for many S44 fires. While Group Captain he has proactively engaged in mentoring and training of other group officers and brigade leaders in the Hunter area.



CAPTAIN PETER SHEARER Wilton Brigade, Wilton

Mr Shearer has been a volunteer of the NSW Rural Fire Service for over 49 years, joining the Wilton Brigade in 1968, and holding various leadership positions including Deputy Captain, Senior Deputy Captain and Captain as well as attaining his Group Leader qualification. He has served as a Divisional Commander and Sector Leader in many local campaign fires.

He has also served on the local district advisory committees including the Group Officer Election committee, Health and Safety committee and the District Training Committee. He was instrumental in obtaining new equipment for the brigade, raising funds, donating his time, equipment and materials for the site preparation and erection of the new brigade station started in 1992, and extended in 2004, and again in 2017. He has mentored and encouraged local youth to become brigade members and has championed women's involvement in the brigade.



Young members' excellence

The 2018 NSW RFS Young Leader Scholarship was awarded to Hannah Redman from Ridgeway Brigade (Lake George District). As part of her award, she completed an 11-day voyage on the STS *Young Endeavour*. This experience increases self awareness, develops teamwork and leadership skills and creates a strong sense of community responsibility among the members of the young crew.

Hannah had to learn new skills and take on significant responsibility as part of her experience: "The most challenging part was definitely on the one day when we take over. I was nominated as navigator for the youth crew. I had to get the ship from point A to point B ... I had to map points out on the chart and go through the navigation plan to get to those points."

Hannah said her experiences on the STS *Young Endeavour* will help her as a brigade member. "There is so much teamwork involved to make a ship run smoothly and it's the same with a brigade."

You need a lot of teamwork to be an effective firefighter and ... [I'll be] bringing back the communication that I've learnt and all the brand new things to do with teamwork that I've learnt from all the staffies especially... I'll bring all that back to the brigade."

They sailed back in to Sydney Harbour on 26 April. Hannah was presented with a certificate by Lieutenant Commander Mike Gough, Commanding Officer of the STS *Young Endeavour*, and Executive Director of Membership and Strategic Services Bronwyn Jones PSM.

There was a very strong field of applicants for the Scholarship. Tim Honner from Willow Tree Brigade in the Liverpool Range District was awarded runner-up. Patrick Rankmore from Curlewis Brigade, also in the Liverpool Range District, received a Highly Commended Award for his excellent application. In recognition for their efforts, Tim and Patrick attended the 2018 National Volunteering Conference.

The regional winners were Daniel Purnell from Alphadale Brigade, Northern Rivers District in Region North; Brendan Kingdom from Lake Albert Brigade, Riverina District

in Region South; Lachlan Sutherland from Gulgong Brigade, Cudgong District, Region West and, from Region East, Ivana Marinov from Hillside Brigade, Hills District.

During National Volunteer Week, Minister for Emergency Services, Troy Grant announced the winners of the 2017 NSW Rural Fire Service and NSW State Emergency Services Cadet of the Year and Young Volunteer of the Year Awards.

The event held at Parliament House, recognised the outstanding achievements of Cadet of the Year Anthony Coan, former student of the

Carenne School, Bathurst, NSW RFS Young Volunteer of the Year Jack McQuellin (12–15 years) from Riverina Highlands Cadet Brigade, and Ash Morrow (16–25 years) from North West Orange Brigade.

All of these young members were recognised for demonstrating maturity and an ability to work in a team while also displaying enthusiasm, initiative and commitment to the Service and their colleagues.

NSW RFS Commissioner Shane Fitzsimmons stated that “the effort and enthusiasm of young members in the RFS is significant and these awards acknowledge their hard work, camaraderie and community participation”.

Each year Rotary presents Emergency Services Awards, including recognition of young volunteers in the emergency services. Lachlan Sutherland

from the Gulgong Brigade, in Cudgegong District, received the inaugural Dorothy Hennessy OAM Emergency Services Youth Scholarship Award at the Awards Ceremony in May. Lachlan joined his local Brigade as a junior member and has now moved into a staff role with State Mitigation. This scholarship will allow Lachlan to pursue opportunities which will assist in furthering his career within the NSW RFS.

Applications for the Young Leader Scholarship are now open <https://bit.ly/2yIx9Ld>

And information about Young Volunteer awards is available on MyRFS:

<https://www.myrfs.nsw.gov.au/InfoAbout/Membership/YouthParticipationintheNSWRFS.aspx> ■



Left: NSW RFS Commissioner Shane Fitzsimmons with, from left, Cadet of the Year Anthony Coan, NSW RFS Young Volunteers of the Year Jack McQuellin and Ash Morrow. **Above:** Lachlan Sutherland, from the Gulgong Brigade in the Cudgegong District. **Below:** Commanding Officer of STS *Young Endeavour* Lieutenant Commander Mike Gough presents Hannah Redman the 2018 NSW RFS Young Leader Scholarship award.

recognised

The NSW Rural Fire Service has a wealth of young members volunteering and building up their qualifications and experience.





ST FLORIAN'S DAY BRAVERY & SERVICE AWARDS 2018

Each St Florian's Day, the NSW RFS holds its annual internal bravery and service awards. Drawn from across the Service, recipients are presented with awards in recognition of outstanding bravery or service.

Despite the Commissioner's jokes about May the 4th being Star Wars "may the force be with you" day as well as St Florian's day, the importance of the occasion cannot be missed.

As Fiona Peacock, one of the recipients from the Cassilis Brigade said, "we had no idea how important this was until we got here.

All here know that St Florian's day is an important day for the NSW RFS – from the uniformed staff and members to the families proudly smiling at their loved ones.

Both the Minister for Emergency Services, Troy Grant, and Guy Zangari,

the Shadow Minister for Emergency Services, are here showing that it's a day for both sides of politics to demonstrate support for the crucial work of the NSW Rural Fire Service volunteers.

Troy Grant, fresh from completing the gruelling Kokoda Track, to raise money for charity, acknowledged that St Florian's Day awards are about the "service above self" that RFS members embody. He wants to offer support, he said, to show that despite recent criticism by some who speak from the privileged position of hindsight the government knows that

"today is about humble groups of people being recognised for their 'extra service above self'".

During the ceremony, the Commissioner made everyone feel comfortable, stating to family members that while there are many uniforms and professional photographers in attendance, family is central to this ceremony so they shouldn't be afraid to come down the front to take a photo of your loved one getting an award.

There's an extraordinary range and diversity of recipients, from people who've attended the most gravely ill in times of duress to administrative units such as Procurement who've

helped the Service become more efficient.

The Commissioner reinforced that it is very important to take small moments of time out to say thanks given that the rest of the time members are tirelessly giving their efforts behind the scenes. And he thanks families, knowing that without family support, volunteering could not be sustained at brigade level. He acknowledges that for the families of RFS members there are many empty seats at tables at Christmas and summer holiday time. Receiving a St Florian's Award is special. ■



May 4 is St Florian's Day, named after the patron saint of firefighters. It is also known as International Firefighters Day.



2018 RECIPIENTS

Commissioner's Commendation for Service (Individual)

Group Captain Brian Ayliffe AFSM
Cobargo Brigade, Far South Coast, Region South

Deputy Captain Bruce Davies
Jerrabomberra Creek, Lake George Zone, Region South

Captain Stephen Garbutt
Wyrallah Brigade, Northern Rivers Zone, Region North

Firefighter Samuel Hatch
Tamworth Support Brigade, Tamworth District, Region North

Captain Neil Percival (Chaplain)
Broughton Vale/Berry Brigade, Shoalhaven, Region South

Firefighter Shirley Snowden
Tinonee Brigade, Mid Coast Team, Region East

Senior Deputy Captain Samuel Tout
Murringo Brigade, South West Slopes Zone, Region West

Firefighter John Tucker
Tamworth Support Brigade, Tamworth District, Region North

Commissioner's Certificate of Commendation (Individual)

Inspector William Britt
Bland Temora Zone, Region West

Mr Lindsey Flynn
NSW RFS Headquarters

Mr Aaron Howard
NSW RFS Headquarters

Mr Scott Hoy
NSW RFS Headquarters

Firefighter Rowena McGregor
Hydes Creek Brigade, Mid North Coast Team, Region North

Firefighter John Sandland
Tabourie Brigade, Shoalhaven, Region South

Commissioner's Certificate of Commendation (UNIT)

Castlereagh Zone Rural Fire Brigades and Cassilis Brigade
Castlereagh Zone & Liverpool Range Zone, Region North

Cudgong Airbase Crew Aviation Support
Cudgong District, Region West

Down the Wire Technicians

Lake George Zone Rural Fire Brigades and Group Officers

Mudgee 1A
Cudgong District, Region West

Northern Rivers Zone Group Officers and Brigades
Northern Rivers Zone, Region North

Pacific Palms Rural Fire Brigade
Mid Coast Zone, Region East

Picton Rural Fire Brigade
Southern Highlands Team, Region East

Procurement Accreditation Team
NSW RFS Headquarters

RFS Workers Compensation Working Group
Rural Fire Service Association and NSW Rural Fire Service

Stoney Creek Brigade
Lake George Zone, Region South

Commissioner's Unit Citation for Service

Northern Rivers Aviation Support Brigade
Northern Rivers Zone, Region North



"Today is about humble groups of people being recognised for their 'extra service above self'."

Left: The recipients of 2018 St Florians Day bravery and service awards pose with the Minister for Emergency Services, Troy Grant, and Commissioner Shane Fitzsimmons on the front steps of NSW RFS Headquarters.

Above right: The Cudgong Airbase and Aviation Support crew with their award and Commissioner Fitzsimmons.

Donations fund hot fire training equipment

Funds donated to brigades under the NSW Rural Fire Service and Brigades Donations Fund (the DGR) have contributed equipment and infrastructure to support hot fire training.

Last year, using the funds donated to the NSW RFS, the DGR facilitated three Hot Fire Training Centres—Lower Hunter, Bland Temora and Canobolas—and two mobile 40 foot container cells. Hot fire training cells are used for the advanced structural fire fighting course. The prior year thermal imaging cameras (TIC) were purchased, one for each district.

To complement these training tools, the Trustees determined to fund five thermal mannequins, one for each DGR funded Hot Fire Training Centre.

Thermal mannequins contain a heat source internally, replicating what may be encountered while using a thermal imaging camera. The picture below right is what you would see through the TIC, regardless of smoke density or available light. ■

Brigades that want to receive tax deductible gifts/donations either have to be individually endorsed by the ATO as a deductible gift recipient or participate in the NSW RFS and Brigades Donations Fund.

There are two parts to the fund, one for donations made to member brigades and the other for donations made directly to NSW RFS. There is a DGR committee which has oversight of the fund administration.

Details are explained in SS 2.1.14, should you wish further detail, and an article was published in the Bush Fire Bulletin vol.38 no.2/2016.





Vale Father Peter McGrath 1940-2018

Father Peter McGrath was remembered at a service at St Anthony in the Fields Catholic Church at Terrey Hills on 8 March. NSW RFS Commissioner Shane Fitzsimmons spoke a few words, reflecting on the significant role that Father Peter had played in the NSW RFS, but also to him and his family personally.

For more than 45 years, Father Peter was one of the Service's chaplains. Senior Chaplain Ian Spall writes: "Father Peter McGrath was a NSW RFS Chaplain before records were kept. He was part of the RFS since the 1970s. He was quite the character within his ministry, flamboyant, creative, relational, caring, boisterous. These are some of the words that go best to describe him. Maybe out of the box in style, but he was always loving. He could also be described as open, honest and often vulnerable."

Commissioner Fitzsimmons said Father Peter was recognised for his extraordinary generosity and care, his unique style and approach, his openness, sense of humour and candour, and most importantly, his unwavering commitment to serving others and seeking to make a real and meaningful difference.

Commissioner Fitzsimmons AFSM, along with Superintendent Craig Geddes and Senior Chaplain Ian Spall, presented Father Peter's family and colleagues with NSW RFS medals and a service flag in recognition of his extraordinary service and dedication to the Service. RFS members formed a guard of honour at the memorial service.

Father Peter was the popular parish priest at St Anthony in the Fields for 18 years. He married and performed services for many members.

His influence spread widely; he taught at North Sydney Teacher's College and the University of Technology, Sydney, and for five years Fr McGrath was a ratings winner on radio station 2SM where he was a regular commentator on social issues.

Father Peter McGrath was the founder of the Passionist Family Group Movement which encouraged faith in action in local community.

At his memorial service, a letter of gratitude and condolence was read from the men in the high security prison in Dallas to whom he had ministered and who asked him to set up a "Family Group" for them some years ago. "Though some have been there for 48 years, they thanked Peter for giving them a reason to live and a faith that brought hope."

Father Peter McGrath was awarded an Order of Australia Medal in 2011 for service to the community.

Father Peter will be missed by many in the community and certainly by many in the NSW Rural Fire Service. ■



"Though some have been there for 48 years, they thanked Peter for giving them a reason to live and a faith that brought hope."

OUR BULLETIN HISTORY

Bush Fire Bulletin

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(Photo by courtesy of "Men of the Land" Society.)

BOY SCOUTS DISPLAY FIRE WARNING SIGNS.

The Boy Scouts pictured above at the Australian Boy Scouts Jamboree held at Lansdowne, near Sydney, from 29th December, 1960, until 9th January, 1961, made good use of fire warning signs issued by the Bush Fire Committee.

These signs served to remind those attending the Jamboree from all parts of the Commonwealth and overseas countries, as well as visitors,

of the need to take care with fire. Fire prevention is an integral part of the training of all Boy Scouts and emphasis is placed on the danger of allowing bush fires to originate from uncontrolled camp fires.

Maximum precautions were taken with the assistance of the Board of Fire Commissioners of New South Wales, to guard against the outbreak of fire at the Jamboree.

BUSH FIREbulletin

onTrove



The NSW RFS has joined forces with the National Library of Australia to digitise the entire collection of the Bush Fire Bulletin dating back to September 1952.

All editions of the Bush Fire Bulletin are available online and are fully searchable, making this huge historical archive easily accessible.

Commissioner Shane Fitzsimmons has praised the chance to make the Bush Fire Bulletin so accessible.

"The skill and dedication of our volunteer service has been recorded in the pages of the Bush Fire Bulletin, informing and bringing to life the important work our members undertake," Commissioner Fitzsimmons said. "I am very proud that this history of the NSW RFS will be available for all of Australia and the world to see."

Search place names, brigade names, dates and fire-related topics such as 'fire trails'.

How to search Bush Fire Bulletin On Trove

1. Type in your search term
2. Click 'Go'

You will be taken to the Bush Fire Bulletin's archive on the National Library of Australia's Trove website

3. A range of articles will be offered for selection
4. Click on the green View Online box on right to

view the article

You can print, download or simply read online.

To initiate another search return to the search box on the Bush Fire Bulletin page on the NSW RFS website.

Or leave the search terms ("nla.obj-284283986" OR "nla.obj-284265362") in the search box to stay within the Bush Fire Bulletin archive.



BUSH FIRE BULLETIN

SIGN UP TO RECEIVE THE **BUSH FIRE BULLETIN** DIRECT TO YOUR HOME OR UPDATE YOUR DETAILS



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Cover photo This is the view Ingleside RFB crew saw from the cab of their tanker as they responded to the Moorebank Avenue fire, April 2018. Photo by RFS member Joshua Grainger

LIFT-OUT: GUIDE TO THE NEW NSW RFS CONSTITUTION

VOLUME 40 NO 1/2018

BUSH FIREbulletin

THE JOURNAL OF THE NSW RURAL FIRE SERVICE



Community unites for Tathra

Deployments to Canada, Gallipoli
and the United States

Fires in electric vehicles

A long hot summer, a bone dry winter



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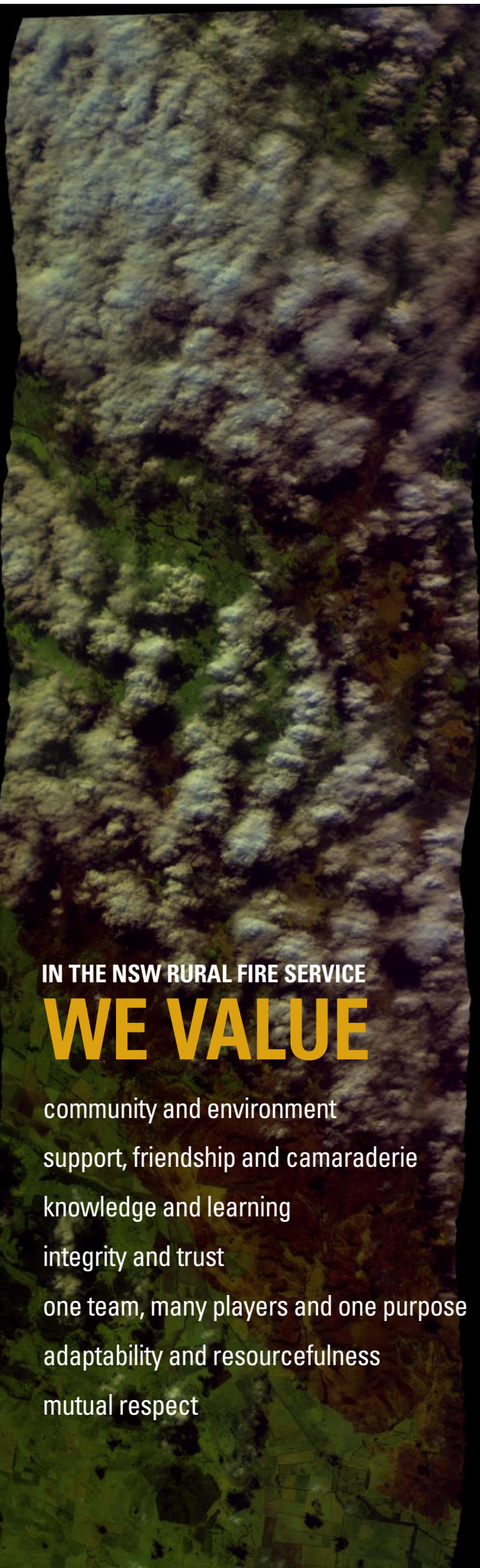
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IN THE NSW RURAL FIRE SERVICE

WE VALUE

community and environment
support, friendship and camaraderie
knowledge and learning
integrity and trust
one team, many players and one purpose
adaptability and resourcefulness
mutual respect

Foreword



There has been considerable attention recently on challenging and destructive bush fires such as those which affected communities like Tathra and around south-western Sydney. These fires were difficult to contain, and were particularly challenging given how late in the season they occurred.

It's worth remembering though that these events across March and April, were just two of more than 14,000 bush and grass fires our members have dealt with across the 2017/18 season.

The state's north saw fire activity in August and September, and while there was somewhat of a reprieve during October and November, serious fires were experienced in areas such as the Hunter, Northern Tablelands and western Sydney by Christmas.

In the early parts of this year, the challenge continued thanks to lightning causing around 500 new fires across the ranges.

The late conclusion to the fire season – which saw a total of 22 days of total fire ban and more than 70 homes destroyed – shows how we, just like the community, can't be complacent about the threat of fire.

While the loss of property is a tragedy for those affected, it's worth reflecting once again on a very important statistic – that is, there was no loss of human life.

It's important to recognise that this includes no loss of firefighters. I'm always reminded of the danger that our people face, never more so than when I attended the recent National Volunteer Memorial service held in Canberra on 1 May. A new memorial wall was unveiled at the ceremony, featuring the names of more than 70 NSW RFS volunteers who have lost their lives in the line of duty. You can read more about the memorial in this edition of the Bulletin.

You will also find in this issue a feature on the new Brigade Constitution, which is now in effect for all brigades. This is a big step forward for the Service and, most critically, it provides a greater level of certainty and protection for our members. The Constitution allows brigades to maintain their identity, and create brigade rules and standing orders, to ensure the brigade operates effectively and within the requirements of today's legislative environment.

As we send off our members to assist with the devastating fires in the United States and Canada this month, we can look back with pride at the unprecedented deployment of front-line firefighters to British Columbia in 2017. The article in this issue highlights the fascinating differences in firefighting in these locations compared with Australia.

The 2018/19 season is starting early. Whatever role you perform in your brigade, stay safe and thank you all for your continued service with the NSW RFS.

Regards,

Shane Fitzsimmons AFSM
NSW RFS Commissioner



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@RFSCommissioner

Reduced traffic speed trial to keep members safe



From September this year there will be a twelve-month trial of a speed limit around emergency vehicles on NSW roads. The Minister for Emergency Services, Troy Grant, announced in April that the 40 km/h reduced speed limit will apply on roads when emergency services vehicles have their red and blue lights flashing at emergency incidents.

The NSW Rural Fire Service Association has been actively pursuing this initiative and the NSW RFS has worked with other emergency services and the NSW government to develop this initiative. The trial follows similar laws that have been introduced in Victoria, Western Australia and South Australia. The reduced speed limit is designed to ensure the safety of NSW RFS members and other emergency services personnel who are responding to emergencies.

An operational brief released on 7 June contains further details and can be viewed on MyRFS.

New Research Hub to focus on bush fire risk



The University of Wollongong will house a new \$4 million Bushfire Risk Management Research Hub, which is part of a five-year research partnership between the university and the Office of Environment and Heritage.

Minister for Emergency Services, Troy Grant, welcomed the partnership and the Hub's specialised focus on NSW bush fires.

"This Hub brings together academic expertise and practical knowledge from our firefighters to develop ways we can mitigate bush fires in the future," Mr Grant said.

"What works for one area may not work for another, so it's great that this research will look at local solutions across the state," Mr Grant said.

Black Hawks to be used by NSW RFS



The NSW RFS will take delivery of two Black Hawk helicopters for use during emergency operations.

The Commonwealth Government has agreed to the transfer of the aircraft once they are withdrawn from military service. The aircraft will be transferred from the Defence Department to the NSW Government, through the NSW RFS.

Once refurbished, they'll be used in a range of emergency operations including bush fires, floods and other disasters. They will also be used for RAFT and RART operations.

The NSW Government confirmed the transfer as part of the State Budget in June, with \$6.5 million allocated to converting the aircraft into firefighting resources.

The Black Hawks have a cruising speed of 270 km/h and are expected to be operational for the NSW RFS over the next two years.

The task profile of these aircraft will be consistent with the current primary and secondary roles of RFS owned helitak aircraft.

Rotary Emergency Services Community Awards



The 2018 Rotary Districts & Clubs of NSW and ACT Emergency Services Community Awards were announced on 1 June. These awards recognise and acknowledge the selfless community service of NSW and ACT emergency service personnel.

Commissioner Fitzsimmons said this is “a wonderful way to celebrate and recognise emergency services personnel, both salaried and volunteer, who have been nominated by their communities and peers in recognition of extraordinary service”.

NSW RFS Inspector Glenn Byrnes was awarded Overall Officer of the Year Serving in a Paid Capacity. Inspector Byrnes of the Lower Hunter

Zone has had a huge portfolio of roles with the NSW RFS for over 30 years. NSW RFS member Lachland Sutherland proudly received the inaugural Dorothy Hennessy OAM Emergency Services Youth Scholarship Award.

Congratulations to all nominees for their extraordinary work. There were four NSW RFS finalists, including long-serving Kearsley Rural Fire Service Captain, Les Goldie, Donald Anderson, who holds multiple roles in the Central Coast Region, and Deputy Captain of Engadine Brigade, Deborah Sharp, who has been an inspiration to many and filled multiple roles.

National Emergency Services Memorial



The new Emergency Services Memorial Wall was unveiled at the National Memorial Service in May. Held at the Lake Burley Griffin National Emergency Services Memorial in Canberra, the memorial service honours the commitment and ultimate sacrifice of fire and emergency service personnel who have died in the line of duty.

The wall records the names of over 400 men and women who have lost their lives in protecting their communities. There are 74 NSW RFS members whose names are memorialised on the wall.

Deployment to United States and Canada, August 2018



The NSW RFS has joined interstate colleagues on a six-week deployment to assist firefighters in the United States. California and the west coast have been most affected with six lives lost and over 500 properties destroyed.

The Australasian National Resource Sharing Centre organised the deployment of 188 Australian and New Zealand personnel. The contingent included divisional commanders, heavy plant supervisors, air base managers, safety officers and sector leaders, who are assisting thousands of US firefighters.

The Canadian Interagency Forest Fire Centre has also requested assistance from Australian fire fighters who will join those already deployed from Mexico and the United States. Canada is experiencing significant fire activity with six priority fires burning in Ontario at the time of the request.

A long, drawn out

Bush fires challenged Rural Fire Brigades throughout the state well into the autumn of 2018.

The 2017/18 season was a long drawn out season commencing in August and still going in April. Some of our members were deployed to Canada in July, then fires started in the north of the state in August and September.

There was somewhat of a reprieve in late October and November, but by Christmas Day in the Hunter, Northern tablelands and western Sydney the fires were numerous and they didn't stop, especially in January and February. In late January/early February, 500 plus fires on the ranges started with lightning.

In November between 20–30 fires started in the Mid Murray zone due to a large storm that passed through the region. They were all relatively small, but forty firefighters chased lightning strikes over an eleven-hour period.

Firefighters continued work right up to Christmas with a fire burning near Mulgoa on 23 December. Crews put in



hard work to contain this fire by Christmas Day assisted by the VLAT Nancy Bird. On Christmas Eve there were still 37 fires burning across the state with 17 not contained and 350 crew working across the fire grounds.

The new year brought continued low humidity and hot temperatures with 40 plus degrees over the first weekend of 2018. TOBANs declared for Sydney and Greater Hunter areas continued on Monday 8

as the warm, dry and windy conditions persisted. Storm activity with dry lightning started dozens of fires across NSW through the week, with some light rain eventually assisting firefighting efforts.

season



2017/18 BUSH FIRE SEASON ACTIVITY

14,467	bush and grass fires
265,848	total hectares burnt
23	total fire ban days
12	Emergency Warnings
74	homes destroyed
63	homes damaged
1000's	homes saved
0	lives lost

A Harvest Safety Alert was issued Friday 12 January for the Mid Murray Zone, before another warm weekend continued. The Masonite Road, Tomago fire started on Saturday 13 January. This fire

was one of two during January that went to Emergency Warning (EW), with concern for communities to the north of Newcastle Airport, including Campvale. This fire went back to advice overnight however

under strong southerly winds spotted over and went back to EW Sunday afternoon. Crews were assisted at this fire by aircraft including the VLAT. This weekend also saw the start of the TJ's fire which

Main image: 14 April 2018 Moorebank Avenue fire attended by the Galston Rural Fire Brigade. Photo: David Aslin. **Lower left:** The Bannaby Road fire near Taralga in early January. Photo Ned Dawson. **Right:** Sir Bertram Stephens Drive, Royal National Park. Photo: Sharon Quandt.

started in rugged inaccessible terrain in the Putty State Forest and which burned approximately 4800 hectares.

As well as bush and grass fires, our members responded to other emergencies, such as the structure fire in Harrington which was contained before it spread to neighbouring businesses. NSW RFS and FRNSW attended a truck crash on the M1 motorway at Cooranbong near Morriset on 15 January. One of the vehicles caught fire and spread to nearby bushland.



Over the final week of January, storm activity and lightning was responsible for dozens of new ignitions, particularly around the Blue Mountains/Wollemi National Parks, the Greater Hunter, Mudgee and Lithgow areas.

The M1 was closed for some time, affecting travel for motorists. This fire saw a unique and complex response with a FRNSW CAFS unit supported by NSW RFS bulk water tankers attacking the truck fire while the aircrew supported ground crews to attack the bush fire.

The Dipper Rd, Dandry fire in the Pilliga kicked off around Thursday 18 January. Fire fighters worked to protect isolated rural properties as the Newell Highway was cut near Narrabri. Crews were assisted in their efforts by firebombing aircraft. NSW RFS crews did not leave the fire ground until 31 January, by which time the extensive fire had burnt approximately 59,760 hectares.

Saturday 20 January saw an outbreak of fire on Sir Bertram Stevens Drive in the Royal National Park, south of Sydney. Burning more than 2190 hectares, the fire produced a large amount of smoke visible across southern parts of Sydney, Wollongong and the south coast and the alert status went to Emergency Warning.

Following the park's closure, a multi-agency response saw crews working to have the park reopened in time for the Australia Day long weekend.

Across this weekend a number of fires kept crews busy, including the Long Gully Road fire, Bannaby east of Taralga. DC10 Nancy Bird assisted fire fighters with retardant drops and heavy plant established containment lines.

Over the final week of January, storm activity and lightning was responsible for dozens of new ignitions, particularly around

the Blue Mountains/Wollemi National Parks, the Greater Hunter, Mudgee and Lithgow areas. The 695 Fire started 14 February in the Singleton LGA in the Wollemi National Park, with a National Parks and Wildlife firefighter seriously injured in a tree fall incident. It reached Emergency Warning (EW) status on 14 February. It was contained



Top: Table Top RFB in the Southern Border region. **Bottom:** The Moorebank Avenue fire, Holsworthy. Photo by Rachel Wildman



by the end of February with the assistance of heavy plant and firebombing aircraft.

The fire at Mt Canobolas to the west of Orange on 10 February threatened property and a communications tower. The air tankers and heavy plant helped construct containment lines around vital communication infrastructure.

An evacuation centre was set up at the Orange showground. The fire burnt out 1671 hectares of bushland, however no homes were lost.

The Bobbiwaa Creek Mt Kaputar fire, between Bingara and Narrabri, which started 15 February was contained by 22 February with Remote Area Fire Fighters dropped in to extinguish small

areas of fire activity in the inaccessible terrain in the following days. The fire burnt 4133 hectares of bush.

An Emergency Warning was released for a grass fire near Mulwala 28 February with VLAT Nancy Bird assisting.

In March, the loss of 65 houses and 35 cabins and caravans was a blow to the small far

south coastal town of Tathra. NSW RFS members and other services and residents fought furious and erratic fires. A report about the emergency response to the Tathra fires has been delivered to the Minister with 12 recommendations.

You can read more about the Tathra fires in the following pages.

On 14 April, a fire started on Moorebank Avenue, Holsworthy. It crossed Heathcote Road and quickly spread towards Alford's Point, Bardon Ridge and Menai threatening the urban fringe suburbs of Sydney. It was an extraordinary effort by ground crews, marine units and firebombing aircraft to bring this complex fire under control. Given the location near Holsworthy Army Base, Lucas Heights nuclear facility and high density suburbs, controlling this fire was a complex task. Crews saved six facilities, 877 homes and four outbuildings. Five homes were damaged and a cubby house was destroyed. The fire was contained on 17 April.

Challenging fires continued throughout April. Extensive smoke and dust storms affected a large area of the lower western border during a grassfire at Boomanoomana.

The Bush Fire Danger Period ended on 30 April. After one of the driest winters on record and a busy, long and drawn out season. ■



Top: The Dipper Rd, Dandry fire in the Narrabri LGA January 2018

Above: A haystack fire

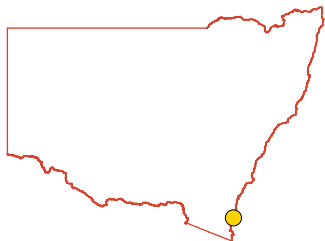
With Tathra under threat

As the residents of Tathra gradually move into the rebuilding phase after the traumatic period of demolition and sifting through rubble, the town's resilience is on show, albeit with an emotional backdrop.



Above: Cheryl of Seaspray Images was travelling along the Tathra Road towards Tathra to go fishing, but decided to stop at Wallagoot Lane turnoff and return home when she saw this smoke plume.

a community unites



The lingering smell of smoke had finally begun to dissipate, and the population of the Far South coastal town of Tathra began to rally. The regular town meetings, the fundraisers, the support from outside—both formal and informal—have contributed enormously to keeping the community informed and together.



The State government has provided \$10 million for asbestos removal and cleanup, the large not for profit support organisations have given practical support, the Bega Valley Shire Council's Mayoral Appeal Fund as of early July raised nearly \$1.3million. The Federal Government donated \$250,000 providing mental health and trauma support into the months ahead. Mayor Kristy McBain and the distribution committee have been overseeing the disbursement of funds to residents.

Communities from around Tathra and far beyond have raised funds and collected clothes and household items to help those who have lost their homes. The Tathra Ladies Golf donated \$3000 to the Tathra Rural Fire Brigade to help the Brigade build its capability for future incidents and Merimbula Imlay ladies bowlers presented a cheque for \$2,500. The Brigade will purchase a much needed new generator to use during major power outages.

The qualities of the community were evident during the fire and the days afterwards. A local Tathra Bakery gave free breakfast to residents and continues to raise funds; the local supermarket gave groceries, the surf club was a supportive drop-in centre providing aid to residents. A local coffee cart business provided unlimited free coffees for emergency workers and locals. These are just a selection of the many organisations and individuals providing support.

The Incident Management Team (IMT) operating out of the Fire Control Centre (FCC) brought together all participating agencies—the NSW RFS, NPWS, Forestry and FRNSW—to coordinate their resources strategically. All agencies worked alongside residents in extraordinary conditions to protect the people and property in Reedy Swamp, Vimy Ridge and Tathra.

All brigades in the Bega Valley were utilised including strike teams from Eurobodalla and Shoalhaven. This was the first major incident for the Operations Support Group who did an extraordinary job in extreme conditions.

Sunday 18 March saw numerous fires around the state, 18 of those burning in the Bega Valley, two of which—Kerison's Lane and Frogs Hollow—were very serious incidents. A fire started in the area of Tarraganda, east of Bega, about midday. It crossed the Bega River pushed by strong and gusty northwesterly winds. With estimated 80–90 km/h winds, the embers hurled across the town and onto the beach. The apparent random destruction of homes dotted across the town resulted from embers raining down on gardens and homes. Trees, gardens, decks, leaf-littered gutters burst into spot fires with fire fighters scrambling from one fire to another.

This was a challenging fire, not for its size or terrain, but because of its erratic behaviour fuelled by shifting wind gusts.

The fire was sporadic and spread out across the entire town of Tathra. It did not have one continuous edge, so crews were spread out. Winds were changeable, turning flanks into fire heads.

As the day progressed, a southerly change pushed the fire in a northerly direction. Southeasterly winds pushed the fire in the evening towards Dr George Road.

The local school was under threat as a gully to the northwest channelled the fire in its direction. The school grounds lost 120 trees which had become unstable and some shade sails and play equipment. In a small town the local school is a community hub and it was a huge relief that it was saved. The children were back at school on Tuesday 27 March, which was incredibly important for helping families regain a sense of security and normality.

“

When we came on shift the others had been on the go for 7 hours straight and were exhausted. We came on as the night shift. There were three people in the truck and the average age of the people in that truck was just under 70.”

Richard Gallimore
Tathra RFB

*Reproduced with permission
of ABC South East*

The Local Emergency Operations Controller (LEOCON) opened a Local Emergency Operations Centre (LEOC) in Bega to support the IMT fire fighting efforts and coordinate support to affected communities. The evacuation centre was established at the Bega Showground.

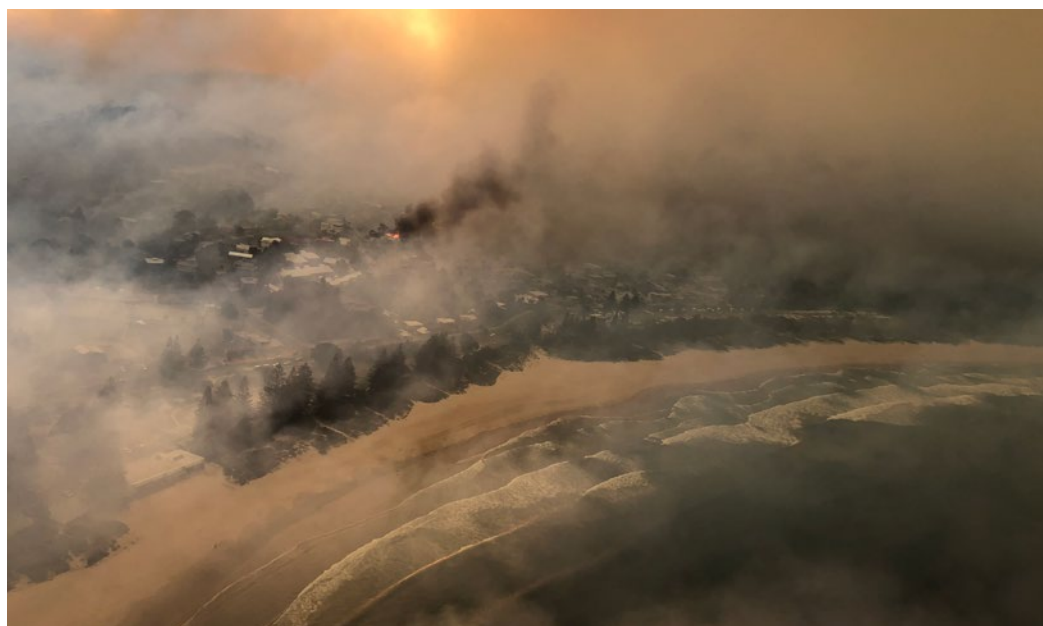
The NSW RFS Public Liaison Officers were giving early and frequent updates to those

in the evacuation centre, promising not to gloss over the details, and to keep them informed as the intelligence came in. Other organisations provided a range of services, check lists for uncontactable neighbours and family, food for domestic animals, blankets and clothes for those who'd escaped with very little.

The thanks to the firefighters and other emergency

service workers was evident immediately, with hastily erected signs showing the heartfelt appreciation of residents for the work they did to save their town.

Later investigations found that electrical infrastructure on Reedy Swamp Road was the likely cause of the fire. With media reporting from the streets before fires were out, and residents confined



Top: The entire coastal town of Tathra was shrouded in smoke. Photo by Caleb Keeney, Timberline Helicopters. **Above:** Western Sydney community group 'Sydney Youth Connect' travelled to Tathra to help feed the Tathra community in the days after the fire. Photo by Big4 Tathra Beach Holiday Park.

to the emergency shelter, it was crucial that the Building Impact Assessment (BIA) team got to work as soon as possible. The BIA team were on the streets of Tathra while crews still defended the town, knowing that residents wanted confirmation as quickly as possible whether their homes were still standing. As information became available, residents were ushered one by one into a private room to learn the fate of their homes. Understandably frustrated residents were unable to enter their streets as fire fighters assessed hazards and mopped up smouldering and reigniting trees. By 21 March all roads in the Tathra area were reopened to residents and to those with items still at holiday accommodation.

There were 65 houses lost, 48 damaged, and 35 caravans or cabins destroyed, which is heartbreaking for those who've lost their homes. More than 1390 hectares were burnt. But given the ferocious conditions it's important to acknowledge the numbers of homes saved and the most important fact that no lives were lost. Over 800 houses were saved or untouched by fire.

Euan Ferguson led the recovery operations, coordinating assistance agencies, keeping residents informed, and reassuring them that they would be cared for into the months ahead. As the incident moved out of the "response" phase a recovery centre was set up at the Bega Civic Centre so those affected by fire could meet with representatives from various support agencies.

Tathra bush fire recovery coordinator Euan Ferguson has handed over to Bega Valley Shire Council's Leanne Barnes. Ms Barnes says she will work with the NSW Office of Emergency Management.

In the face of isolated but distressing criticism about emergency response coordination, Former Federal Police Commissioner, Mick Keelty was commissioned by the government to undertake an independent review into the emergency response to the Bega Valley fire.

The report has been handed down and Commissioner Shane Fitzsimmons and FRNSW Commissioner Paul Baxter have welcomed the twelve recommendations and are working together to implement them.

They said it...

Responses from the Tathra Rural Fire Brigade captain, Adam Wiggins, and other members of the brigade give heartbreaking insights into what they faced as fire rushed to their home town.*

"I personally can't do everything and I might not even be able to do much, but collectively it all adds up."

*Sally Gallimore,
Tathra Rural Fire Brigade*

"This was home and home was being threatened big time. I could see the fires coming towards our house, but I felt my first duty was to go and fight the fires further away from the house. The whole time I knew my wife was left at home behind to try and protect our house."

Anthony Tailor

"I was wearing my fitbit that day and for about an hour and a half my average heart beat was 149 beats per minute and for half an hour of that it was 168 beats...you couldn't breathe, you couldn't see 2 foot in front of yourself... my lips were blistered, I had burn marks in my ears where the embers were landing.

"I couldn't sleep that night. I was so tired but my eyes wouldn't shut they were that swollen... I feel a bit of responsibility... this is my patch... it's hard not to feel like you've let 'em down a bit.

"Good mates lost houses and there was nothing you could do... I'm so immensely proud of my guys. The pride I have in my brigade is pretty high."

*Adam Wiggins,
Captain, Tathra Rural
Fire Brigade*

**Quotes reproduced with permission from ABC South East*

District Manager, Region South, John Cullen commended the strong relationships among the local council, Bush Fire Management Committee

and the community. These relationships were established long before the fires began and are crucial for the community's recovery and resilience. ■



Above: Despite the fire's intensity, 1390 hectares razed and the loss of 65 homes, thankfully there was no loss of human life. Photo by Andrea Olson.



Canadian Deployment

Wildfires raged throughout the Canadian province of British Columbia during the summer of 2017.



Above: The extent of the fire is evident from the scale of the fire fighting aircraft in the sky. Photo by Rolf Poole.
Top right: Nights were cool for fire fighters on the campground.



Rolf Poole, Grant Paisley and Chris Hunter write about their experiences during the Canadian deployment in 2017.

The NSW RFS and Emergency Management Victoria, on behalf of the National Resource Sharing Centre, jointly coordinated the deployment of Incident Management Team (IMT) personnel and for the first time firefighting personnel to British Columbia (BC), Canada. IMT personnel included public liaison officers, fire behaviour analysts, aviation specialists, logistics officers, and a large number of firefighting resources. Personnel comprised: NSW RFS (90), Fire & Rescue NSW (5), National Parks and Wildlife Service (35), Forestry Corporation of NSW (4), ACT RFS (45), QFES (6), and NT(1). NSW RFS Assistant Commissioner, Steve Yorke AFSM, was pre-deployed to British Columbia to assist with logistical arrangements ahead of the main deployment. A total of five deployments were coordinated from July to September 2017.

When the call came for assistance, a State Operations team assisted by Remote Area Firefighting and Specialised Operations (RAFSO) and Membership Coordination Unit worked quickly to finalise personnel suitable for the roles requested by Canadian Fire authorities. Personnel were chosen from those who had previously expressed interest and had passed tests necessary for overseas deployment. The State Logistics Team and MCU were critical to the success of each deployment.

Incident Management Inspector Rolf Poole

The initial deployment to BC consisted of two multi-agency IMTs and a number of single resources who were deployed where needed.

At the Chilcotin Fire Centre, a few hours west of Williams Lake in BC, I met with the rest of the IMT I'd be working with for the next 14 days.

The Incident Controller, Plans Chief, Operations Chief and Logistics Chief were from Nova Scotia and New Brunswick.

The remaining IMT members were Australians from NSW RFS, FRNSW, Tasmanian Fire Service, Victorian CFA and South Australian CFS. We soon earned the nickname "Team United Nations".

Camp Life

Our team was based at the Puntzi Tanker Base at a Forestry Fire Camp. The Australian contingent stayed at several camps including Williams Lake, One-Hundred Mile House, Puntzi, Alexis Creek and Cache Creek, among others. Shared accommodation was large tents with stretcher bed cots, or two person tents for individuals. During the deployment temperatures ranged from -2 degrees C to 36 degrees on some days.

There's a great camaraderie at fire camp, with a culture of swapping service badges, pins, flags or any form of memorabilia and many come prepared with items to swap. We were often questioned about the types of fires we get and how they compare to northern hemisphere wildfires. Canadians are also fascinated with Australian animals that can kill you. Occasionally there would be a very serious comparison of grizzly bears, black bears and the elusive Australian drop bear.

Engaging with local communities

My first deployment was to Puntzi as a Public Liaison Officer (PLO). The Chilcotin Plateau is a picturesque mixture of steep mountainous terrain, First Nations Reserves and forestry operations, as well as isolated ranches and log cabin holiday accommodation. Communities are remote, several hours drive away from major towns, with poor or no mobile phone service. When we arrived, the landscape was extremely dry. The Puntzi IMT managed a complex of five fires, some in inaccessible terrain and others threatening small communities and ranches. Many parts of the Chilcotin Plateau were under an evacuation order, meaning



residents were required to evacuate and not return until the order is lifted. Some local residents had chosen to defy the order and remain with their homes.

As the PLO my role was to keep up to date with the fire status, engage with communities and feed situation reports to the regional office for inclusion in fire updates. The target audiences were the ranchers and the indigenous First Nations communities who were determined to remain in their communities. The focus was to provide them with regular updates so they could make informed decisions and have clear trigger points for action, as well as to engage them as part of the operation.

Chief Irwin Charlie-Boy and Councillors Otis and Percy Guichon from the Tsi-Del Del First Nations Community at Redstone were among the key stakeholders who facilitated the flow of communication. The neighbouring indigenous community of Ulkatcho at Anahim Lake was also engaged as a high priority. With significant aboriginal heritage sites as well as built infrastructure, we needed community knowledge to identify the assets needing protection.

The First Nations' concerns included the wildfire threat to community-managed logging operations and infrastructure as well as the employment of local firefighting teams as part of the operation. BC does not engage volunteer fire fighters as does NSW, with many small communities relying on firefighting as a source of income. Another First Nation concern was the traditional mushroom foraging by the Ulkatcho and Tsi-Del Del communities, which would usually occur after a wildfire.

It was a unique and rewarding experience to work with the indigenous communities and gain a greater appreciation for their culture.

A local fire fighter was demonstrating how to feel for heat underground and shoved his arm down a hole up to his shoulder. The Aussie fire fighters all yelled “you would never do that in Australia!”

Operations

For the second rotation I was deployed to the Van-Jam Fire Centre in Vanderhoof, an hour north of Prince George and was tasked as Operations Chief. There were ten fires in the surrounding area with three uncontained.

The Big Bend Creek Fire 837 had escaped its original containment lines from the previous weeks and presented the biggest threat in the area. While comparatively small compared with others burning in BC, it was burning high value timber assets.

I had been paired up with an Incident Controller from BC, Bruce Doerkson, and our collaborative objective was to formulate prescribed back burning operations and containment strategies. We dedicated the first few days to creating strategic control lines or “guards”, utilising strike teams of heavy plant machinery under the guidance of the heavy plant manager Gordon Clarkeson. Gord’s experience managing the machinery meant that we could concentrate on broad strategies and he could provide feedback on what was realistically achievable within the timeframes.

Operations in BC had significant differences to those in eastern Australia. Operating in a dry continent, Australian firefighting has adapted to

mobile carting of water. In BC there is a complex lake system and despite the dry vegetation, water is never far away. Australian crews utilise a variety of fire appliances to carry water to the fire ground, whereas the BC crews utilise the lake systems and run hose lays with buoy walls (portable dams) nicknamed “pumpkins”. With hose lays often running for several kilometres, the set up can take a number of days to prepare.

Australian vegetation ignites more readily and burns at a faster rate of spread. Vegetation in BC burns more intensely, but fires are slower to reach the canopy and crown. In general terms, in BC there is more time to establish control lines and prepare hose lays. Implementing operational strategies and tactics can be

at a different tempo due to the time it takes to establish a control line or “guard” and then establish kilometres of hose and relay pumps.

At Van-Jam the Unit Crews were available only during a 12-hour daylight shift. With no crews available for night operations, strategic backburning had to be conducted during the warmest and windiest part of the day.

At Fire 837, backburning was implemented with ground ignition crews, commencing at an anchor point and working for several kilometres along dirt roads and constructed guards. The ignition patterns were guided and directed from the observation aircraft.

Backburning and prescribed burning is not as common in BC as it is in Australia



Below left: A lot of time was spent laying out kilometres of hose to siphon water from local rivers and lakes. **Top right:** Vegetation in BC burns more intensely, but fires are slower to reach the canopy.

for a variety of reasons, so experienced ignition crews were in demand. We were fortunate to have the local Titans & Rhino Unit Crews who had previous experience conducting ground ignition.

At the end of the second two-week rotation, effective suppression strategies had been implemented on the Big Bend Creek Fire 837. At the time of my handover the fire operation was progressing into the demobilisation and rehabilitation phases.

The challenging experience certainly left me with a sense of achievement and was truly rewarding.

Fire fighters' perspectives

Grant Paisley, Arcadia Brigade, Hornsby / Ku-ring-gai District reflected on his experience as a member of the Australian Remote Area crews.

The deployment was hard but rewarding, and as agreed in our deployment shift guidelines we worked 12 hours a day for 12 days straight. The fire camps we stayed at had up to 500 firefighters and towards the end of the deployment temperatures dropped to minus five degrees overnight.

The challenges for Canadian firefighters are very different from Australia. The fire smoulders for days or even weeks in the duff layer which consists of matted roots and plant material and can be up to one metre deep. When there is a hot, dry day the smouldering duff layer can result in the re-ignition of the pine trees and the fire takes off again. On one occasion a local fire fighter was demonstrating how to feel for heat underground and shoved his arm down a hole up to his shoulder. The Aussie fire fighters all yelled "you would never do that in Australia!"

The good news is there is plenty of water, so basically you set up containment with kilometres of 38mm hose pulling water from a river or

creek, then patrol each day literally digging up the fire. At the end of each day you had to disconnect every hose to prevent water freezing inside the hose overnight. The terrain was super steep and on our second deployment we put in a line from 1600m to the snowline at 2200m.

Across much of BC a native pine beetle is killing many of the trees, up to 80 percent in some places. The beetle would normally be controlled by a winter cold snap—a sharp drop in temperature to minus 40 degrees Celsius—but there hasn't been such a cold snap for several years so the beetle damage is extensive. The dead vegetation has contributed to the worst ever fire conditions in Canada.

The firefighting "appliances" are hundreds of large pickup trucks hired from all over Canada and the USA. The vehicles are equipped with a portable radio that is mounted to a piece of wooden board with a magnetic aerial. The "bread board" radio is gaffer taped to the dash. The pick-up truck holds four fire fighters, hoses, pumps and polaski tools thrown in the back. During our deployment we drove over 5,000km.

The professionalism and depth of training we NSW RFS crews receive prepared us very well for our time in Canada. It was wonderful working with local crews. The fires affected a large number of Canadians and they appreciated our help. We were even shouted a beer in a pub by some locals.

Chris Hunter from Ku-ring-gai Brigade was deployed to the Elephant Hill fire for two two-week blocks and was part of an Australian team led by a local divisional commander. He found the firefighting activities very different from those in Australia in terms of vegetation, equipment and strategies.

As Grant noted, fires behave differently in the Canadian

vegetation, with quiet trickling fire behaviour like in NSW coastal heathlands. Alternatively, if the fires got into the dry pine plantations, crowning fires were impossible to fight from the ground so they use many more aircraft. The landscape was sometimes steep and rugged, but there was also undulating land and moderate slopes.

Unlike the NSW RFS, which has a permanent off-road fleet that is truck or tanker based, in BC there were many seasonal or contract firefighters employed by the BC wildfire service. They use more portable equipment and aircraft with far fewer off-road vehicles. There are a lot of people on foot, ferried around on hired pickup trucks.

The Canadians use long hose lines whereas in Australia you'd drive tankers down a five-kilometre fire trail and use that as your control line. In BC a lot of time was spent laying

out and filling kilometres of hose and later recovering, then redeploying it.

At times, Chris comments, we'd fill a pickup truck with 40 to 50 hoses to be deployed and used with pumps and buoy walls.

The Canadians do minimal backburning. At times it's quite hard to light fires and get them going if conditions aren't right and the fires were patchy and ineffective.

The Australian firefighters worked in Australian teams, but mixed with Canadian, Mexican or New Zealand firefighters in camp at night. Chris said he missed a proper bed as they bunked down in two-person tents, sleeping on the ground with a foam mattress and sleeping bag.

The Australians were treated to different wildlife as well as different equipment and firefighting strategies, with deer and chipmunks common and a bear sighting in the distance. 🍁





Region North Exercise

The New England town of Glen Innes hosted the Region North Exercise in April.

The Glen Innes Showground is a picturesque venue for the base camp, with plenty of room for people to pitch their tents and roll out their swags under the poplar trees.

Forty-nine appliances rolled in on Friday afternoon and overall 363 personnel attended. As well as Region North brigades, crews, appliances and supporting personnel were invited from Region East and from Queensland Fire & Emergency Services. Through the Border Liaison Committee, a number of interstate New South Wales and Queensland border brigades have a history of cooperative exercises. Nine trucks travelled across the border from Queensland.

The Region North exercise has been held in the New England town since 2003. The variety of facilities available for scenarios is one reason why Glen Innes has proven such a successful location. Scenario Marshalls set up and supervise the activities around Glen Innes at the airport, the NSW Agricultural Research and Advisory Station and other local areas.

Regional exercises are held to teach and refresh members' knowledge and to practice basic firefighting procedures by simulating a range of

fire-related exercises. The scenarios typify the situations that brigades would encounter under normal operations. They provide supervised learning environments and comprise an instructional element then the

crucial opportunity to practice the theory. Scenario staff explain and show crews how to deal with a particular incident, then give them time to practice their response.

Divisional commanders rotate their assigned strike teams through each scenario before releasing them to the next division. The twelve scenarios at the Region North exercises included: a motor vehicle accident replete with

made-up volunteer "victims", practical pumping, Essential Energy electrical, basic skills, vehicle maintenance, pump maintenance, heavy plant and aircraft engagement, a gas scenario, CT, a first aid situation, extinguishers and a protect and preserve scene.

As well as providing a range of incident practice, a regional exercise provides an opportunity for Incident Management Teams (IMT),



Above and right: Forty-nine appliances and 363 personnel attended the Region North Exercise. All photos by Sharon Quandt.



catering and communications units to practice the management and coordination of a large scale operation.

The IMT operated from the Northern Tablelands Fire Control Centre in Glen Innes. Strike Team Leaders commanded strike teams of up to five appliances, a communications operator and command vehicle.

The healthy spirit of competition spurs on the brigades and

awards are given in a number of categories with this year Thora 1 taking out the Overall Best Performing Crew.

The Organising Committee and Incident Management Team worked with districts to facilitate a challenging, invaluable and enjoyable weekend. The crews rolled out of the base camp on Sunday, waved off by the enthusiastic cheers of the catering squad in the grandstand. ■



REGION NORTH EXERCISE AWARD WINNERS

The Thora 1 Crew from the Mid North Coast were awarded the Alan Brinkworth Perpetual Trophy for Best Performing Crew (below). At the presentation ceremony held early Sunday afternoon a range of prizes were awarded.

TJ (Tony Jarrett) Award for Best Strike Team Leader:

Mark Bagnall, Northern Tablelands

Best Crew Leader: Todd Travers, Mid North Coast

Committee Encouragement Award:

Will Ambrose, Far North Coast

Committee Encouragement Award:

Kevin Mason, New England

Outstanding Crew Member: Zac Andrews, Northern Rivers

Outstanding Support Person: Hannah Birkenhead, Northern Tablelands

Best Presented Truck: Wingen 1, Glenugie 1, Woodlea 51 QFES, Thora 1, Kundle Moto 2, Tucabia 2

Appreciation Plaques were presented to: NSW Police, Ambulance NSW and Fred Brown GAAM (Retired) for their hard work and commitment to the Regional Exercise over many years.





The ANZAC Memorial at Chunuk Bair

The Department of Veterans Affairs contracted the NSW RFS to provide up to 30 volunteers to participate in activities supporting Anzac Day 2018 commemorations at the Gallipoli Campaign Historical Site in the Republic of Turkey. Specifically, the activities were to support the Dawn Service and the Australian Memorial Service at Lone Pine.

The Gallipoli Peninsula, known as Gelibolu, was the site of the Battle of Gallipoli, or the Dardanelles Campaign between 17 February 1915 and 9 January 1916. The Allies launched a naval attack followed by an amphibious landing on the peninsula. With the naval attack repelled after eight months' fighting and enormous casualty rates on both sides, the land campaign was abandoned and the invasion force withdrawn to Egypt.

The campaign was the only major Ottoman victory of the war and in Turkey is regarded as a defining moment in the nation's history.

For Australians and New Zealanders, too, 25 April—the anniversary of the landings now known as ANZAC Day—is considered a defining moment in their history.

In response to the request for support from the Department of Veterans Affairs, the NSW RFS put out a call for Expressions of Interest (EOI). The EOI was designed to identify appropriately qualified members with the life experience to be able to cope in outdoor remote environments overnight and be able to successfully engage with visitors of all ages and all walks of life.

For those members fortunate enough to be chosen from EOI, this was a very special deployment for a host of reasons: they were representing the NSW RFS; representing their country; commemorating fallen soldiers; working with the welcoming Turkish people and assisting the community.

They had an important job to do, and as the NSW RFS does, the volunteers undertook a range of roles to help things go smoothly and safely. They supported visitors and Australian and New Zealand officers at the memorial service, welcoming and guiding visitors and helping with coach registration.

The teams were tasked with monitoring and assisting those visitors to the site who were high risk or who had high needs or with limited mobility in case they became unwell or needed help. They handed out information packs at site entrances, and assisted with visitor movements to, on and around the Gallipoli Peninsula during the commemorative period. The role for those deployed was a practical one, one that was very much about serving the needs of the visitors rather than attending the service themselves. The teams were on site working from the evening of the 24th through to the afternoon of 25 April at

various sites and locations on the peninsula which included Anzac Cove, Beach Cemetery, Shrapnel Valley, Mimosa Oto Park and the Southern Entrance and Lone Pine.

Security at the sites is the responsibility of the Turkish authorities who provide considerable military, Jandarma, police and medical assistance to the commemorations each year. Each of the teams had at least one member with Critical Incident Support Service (CISS) training. As a prelude to the tasks at the site, the rather jet-lagged members were treated to a full day tour of the ancient cities of Troy and Assos. And, after their duties were completed at the commemorative sites, the teams enjoyed a tour of the island of Bozcaada before flying back home.

The deployment could not have gone ahead without the financial support of Mastercom, a silver sponsor of the deployment team.

Walking past the trenches was the time I really connected with Gallipoli. After over 100 years the marks of war are still evident. In many ways it's similar to walking through a fire ground after a fire is out.

The scars and history is still there but the noise and fear is gone.

Thomas Hogg

In the words of Brian Graham ("BJ"), the Gallipoli Team Co-ordinator, "this incredible team sets the bar very high, it will be difficult to replicate the camaraderie, spirit, love and support that this team displayed throughout the deployment."

Gallipoli has a special place for Australians, especially so for those with relatives who fought there, some of whom are buried there.

For the members who were deployed, it was an emotional experience. Donna Brotherson recalled an official reminding them that wherever they walked around Lone Pine they were walking over the bodies of our soldiers.

She said "just below you are all of those young men—sons, brothers, lovers, friends, who never stood a chance and

died so needlessly. . . such a waste".

Some of the members took time out to visit the graves of their relatives. Gay Willis had promised her grandmother that one day she would honour her ancestors there, so she was grateful for "the opportunity to honour and farewell" her forebears at Gallipoli.

She says that with "so many unidentified soldiers, I found it overwhelming, I felt as if all those poor souls were still there watching us".

Brigade members often talk about their brigade as their other family, often enough that it can feel clichéd. But it is true and those relationships are built on the camaraderie and teamwork that grows when you work side by side.



Gay Willis says of the group who went to Gallipoli, you are "working with people you have known for only a couple of days, but everyone's training kicks in and it's like we'd been doing it together forever".

Jet-lagged they might have been, and long hours spent fulfilling their tasks, but to hear their comments you can tell that doing the job brought this diverse group of members together.



Top right: ANZAC Day commemoration at Lone Pine. NSW RFS volunteers wearing red shirts in the foreground.
Below right: The NSW RFS Gallipoli Deployment team 2018



A frequent comment was the thanks given to the Turkish people, who continue to welcome Australian and New Zealand visitors year after year. One member of the group comments that she was "humbled by the love and kindness the Turkish people show in caretaking such hallowed ground".

Lesley Smith acknowledged "the openness and warmth of the Turkish people who had experienced such great losses of their own". ■

Above: ANZAC and Turkish trenches recreated in the nearby town of Eceabat.

MASTERCOM was the Silver Sponsor of NSW RFS Gallipoli Deployment 2018



They said it...

"That first day, standing at Beach Cemetery was truly life changing...This was a stunningly beautiful location and then you turn and look at the headstones, so many headstones of young men who were really just kids... I have struggled over the last month to reconcile the sheer beauty with the sheer horror and tragedy that occurred on that very spot."

Donna Brotherson

"Finding Reg Duke's grave was pretty special to me then giving his nephew some sprigs of rosemary from the two planted at either end of the headstone and a photo as well when I got home made me feel pretty honoured to have had this opportunity. Lest we forget."

Wayne Connors

"...as an ex serving Australian Army Medic, visiting the grave of John Simpson Kirkpatrick and standing in the footsteps of the ANZAC diggers in the remains of the original Australian trenches at The Nek stood out as two of the most poignant moments. I never imagined when I joined the RFS nearly 15 years ago that it would one day take me to the other side of the world to take part in commemorating what is such a significant event in our country's history. I'm truly proud and grateful to have been involved in what will hopefully become a long legacy of RFS involvement in ANZAC commemorations at Gallipoli."

Ryan Clarkson

"I found some graves from Pop's regiment and could only imagine the heartbreak he must have gone through."
[Kylie's grandfather survived and returned to settle in Victoria.]

Kylie Ledger

To represent your country, the NSW RFS and pay my respect to those fallen, what a great honour."

Condy Kwan



NSW RURAL FIRE SERVICE



NSW RURAL FIRE SERVICE STATE CHAMPIONSHIPS 2018



14-16 SEPTEMBER 2018
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Fire incidents involving electric

There are more electric and petrol/electric hybrid vehicles on our roads, which will see a rise in the likelihood that NSW RFS members will need to safely manage incidents in which they're involved.

Electric vehicles are now being sold in Australia from manufacturers as diverse as Tesla, Holden, Volvo, Toyota and Mitsubishi.

The increase in numbers of LPG-fuelled cars on our roads over the last decade has seen firefighters adjust incident size-ups to consider whether "routine" car fire calls may in fact be gas fires with Boiling Liquid Expanding Vapour Explosion (BLEVE) risk.

In the same way, firefighters need to understand the characteristics, hazards and firefighting considerations associated with electric vehicles to ensure that safe and effective firefighting is carried out.

This article will not cover the generic safety and firefighting considerations common to all motor vehicle incidents (such as scene safety and hose/branch use), but will focus on the factors that firefighters must be aware of when dealing with electric vehicles. Remember, the NSW RFS role at vehicle incidents is fire protection.

If there is a likelihood that people may be trapped and/or injured, immediately tell FIRECOM that rescue, police and ambulance services are required, while providing first aid and assistance wherever necessary.

Characteristics of electric vehicles

Electric vehicles may be powered solely by a large battery, or by a combination of a petrol engine and battery. Either way, the battery remains a common feature.

Vehicles may contain two batteries: a low voltage 12v lead-acid battery similar to those found in traditionally-fuelled vehicles to power auxiliary systems and a large high-voltage DC battery (between 270v–400v) to power the drivetrain. High-voltage batteries can be nickel metal hydride (NiMH) or lithium ion (Li-Ion) types. Firefighters may be unable to identify electric and hybrid vehicles on sight. Many vehicles have visually similar bodies (eg Toyota Camry)

with only a small "Hybrid" badge to differentiate the electric version from the petrol version (in the same way that LPG-powered vehicles have only a small red diamond on the number plate). Therefore, firefighters must not assume that vehicles at an incident only have traditional petrol or diesel engines.

Electric vehicles run silently. The absence of traditional engine sound does not indicate that the vehicle's systems are not running.

Every electric and hybrid vehicle model differs in battery size and location, the running of high voltage cables, and the location of battery isolation points. Firefighters should familiarise themselves with emergency response guides to various vehicles, available on manufacturers' websites.

High-voltage batteries may require extensive cooling to be rendered safe from potential reignition; manufacturers agree that water is a suitable extinguishing and cooling agent, but large volumes may be required for some time.

Hazards

Always assume that all high-voltage components of an electric or hybrid vehicle are live. Some manufacturers advise that when fire is involved, consider the entire vehicle to be live. Never attempt to breach a high-voltage battery casing. Do not touch orange, yellow or blue cables.

Fires in electric vehicles may be in the vehicle body impacting the battery or in the battery itself. Both NiMH and Li-Ion batteries affected by fire can produce toxic smoke and fumes. Breathing apparatus should be worn; if not available, firefighters should stay well clear of the vehicle.

Electric battery systems run on Direct Current (DC). DC current cannot be detected by AC current detectors (such as modieworks), so do not rely on detector readings.

Electric vehicle fires may occur when the vehicle is charging and connected to an AC charge point. These fires are to be managed as per other fires involving electricity.



and hybrid motor vehicles

By Inspector Dan Meijer, NSW RFS Operational Doctrine and Standards

High voltage batteries affected by fire can emit toxic smoke and fumes. Full PPC and breathing apparatus should be worn for firefighting.

SRS airbags and seatbelt tensioning devices may retain current for some time even after a battery is isolated.

Approach and Arrival

Consider wind direction to keep vehicles and firefighters clear of toxic smoke from vehicle fires.

As soon as you identify that an electric vehicle is involved with fire, immediately locate a water supply. If hydrants are not available, immediately request the attendance of additional tankers from

FIRECOM. Electric vehicle fires require substantial volumes of water to cool batteries for some time.

Rescue

Immobilise and disable the vehicle if possible. Rolled canvas hose lengths can be used as improvised wheel chocks. If possible, put the vehicle into "Park" and if applicable, turn off vehicle power at the "Stop/Start" button.

Suppression

The accepted firefighting technique to extinguish an electric vehicle fire is to use a fast aggressive offensive attack to extinguish fire in the vehicle body, to reduce fire impact on the high voltage battery.

High voltage batteries affected by fire can emit toxic smoke and fumes. Full PPC and breathing apparatus should be worn for firefighting.

If breathing apparatus is not available, firefighters should stay clear of the affected

vehicle and conduct defensive firefighting, allowing the battery to burn out while protecting exposures. P2 masks and similar devices do not provide protection against toxic fumes.

Water should be applied to the battery well after the fire appears to be extinguished. This may require up to 10,000 litres of water. In particular, Li-Ion batteries may reignite if not sufficiently cooled. There must be no fire or smoke in the battery for at least one hour before a vehicle is handed over to a recovery service.

A damaged NiMH battery that has its case breached may emit a caustic alkaline solution. This is extremely unlikely to occur, but if it does, advise FIRECOM of Hazmat presence and request attendance of FRNSW.

Positive-pressure ventilation fans and water streams can be used to direct smoke away from firefighters, other emergency crews and bystanders.



Example of badging that identifies a hybrid petrol/electric vehicle.

Overhaul

Ensure vehicle is completely immobilised. Use a thermal imaging camera (TIC) to identify hotspots and evaluate battery temperature trends.

Use tools with insulated handles, and always assume the presence of an electrical risk.

Ensure batteries are sufficiently cooled before handing vehicles over to recovery personnel and warn them of potential reignition.

Conclusion

Given that it is not clear when approaching a vehicle on fire what fuel type it uses, members should always be ready to encounter electric or alternative fuel vehicles and proceed accordingly. ■

NOT WHAT WE EXPECTED

Crews confronted a fire in a shipping container with little knowledge of its dangerous contents.

By Andrew Macdonald, Group Captain, Macarthur Zone

Around midday on 7 May, three RFS crews with Cat 1 tankers were mopping up a roadside grassfire in south west Sydney when a local resident notified them of a burning shipping container on a nearby property.

The crews arrived on scene about three minutes later to find a 12-metre shipping container and surrounding area alight. The property owner was not at home, but a concerned neighbour provided some helpful intelligence when he mentioned that the shipping container might contain live ammunition. Based on this information the incident controller requested the attendance of Fire & Rescue NSW (FRNSW) for the provision of technical advice.

Among the crews were two CABA-qualified RFS members who quickly donned breathing apparatus and commenced direct attack. The other two brigades ensured an adequate water supply was established. Electricity to the shipping container was identified and isolated at the main residence. Crews considered, but ultimately rejected, the idea of using a quick cut saw to gain access to the shipping container, given it was unknown what hazardous or dangerous items were inside.

The shipping container had rusted through in places which allowed firefighters some limited access to reduce the intensity of the fire burning within the container. In consultation with FRNSW a decision was made

to open the end doors of the shipping container. It was fortunate that the doors were at the opposite end of where the main fire was seated, which was primarily outside the container. When these doors were opened crews were confronted with numerous boxes and drums of loaded shotgun shells and a number of large drums of gunpowder.

A CAFS (Compressed Air Foam System) tanker was requested from FRNSW. This specialised tanker carries 9,500 litres of water which can be automatically mixed with foam. Crews filled the shipping container with foam, ultimately cooling and suffocating the fire. The added advantage of this strategy was that the shipping

container didn't need to be manually emptied to ensure fire extinguishment.

There is no doubt that valuable information from a neighbour and some luck led to a far safer outcome than may have otherwise resulted. Just something else to add to the long list of unknown hazards we all potentially face when attending structural fires. ■

Top left: The shipping container and surrounding items ablaze.

Bottom left: NSW RFS firefighters gain entry to the container. **Right:** A drum displaying just a portion of the shipping container's contents.





New NSW RFS Brigade Constitution takes effect

From 1 July 2018, the new NSW RFS constitution automatically covers all brigades.

The new brigade constitution follows one of the most extensive consultation processes in the Service's history, and more recently road testing with brigades to ensure it will work.

Every brigade needs a constitution and the new constitution will help streamline the management of brigades, while also ensuring the brigade can customise it to maintain their local identity and rules.

To assess whether your brigade wants to make any changes, you'll find the information you need on MyRFS or from your district office.

Here are a few quick Q & As to get you started.

Why does my brigade need a new constitution?

In the 20 years since the NSW RFS was established the Service and its members' roles and responsibilities have changed significantly, as have the laws under which we operate – such as tax deductible donations, work health and safety, and compensation in case of accidents.



Glen Elgin Brigade, in the Northern Tablelands, conduct their AGM in the open air. Photo by Bronwyn Waters, District Coordinator

The new constitution reflects those changes and helps ensure that brigades are operating within the law. It helps protect members if something goes wrong by, for example, providing clarity about membership. In an extreme circumstance, it may become critical in the event somebody is injured, to seek clarity on whether they were volunteering at the time.

The new constitution also provides more scope for volunteers to manage the way they run their brigades. For instance, a small far western brigade might have different features and needs from a brigade with a larger membership base.

So while a brigade constitution may seem like a necessary but not frequently used document, it is one of the most important documents for a brigade.

Is this just more administration for the sake of it?

This change to the constitution has actually come about because of listening to members' feedback across the state and through extensive consultation.

Brigades want the autonomy to make brigade rules that suit their circumstances. It's also because we want to ensure that all members are legally protected.

What is the easiest way for us to implement the new constitution?

The easiest way is to do nothing. The new constitution automatically came into effect on 1 July 2018.

This gives brigades a safety net—if anything goes wrong, the new constitution will apply.

What is new?

Here are some of the issues covered in the new constitution:

- Simplified membership categories
- Requirements for safety training
- Establishing quorums which suit the brigade, and the use of technology to attend meetings
- Providing financial guidance and protection, such as having a common financial year across the state to meet government requirements

But what if the new constitution doesn't suit us? Can we change it and what kinds of things can we change?

There is a standard constitution that automatically applies to all brigades, but individual brigades

continued page 28



NSW RFS New Constitution

First Level – Member Types

FIXED – defined in constitution

ENTRY CLASSIFICATIONS



OR



JUNIOR

Junior service
counts to probation

PROBATIONARY

(minimum 6 months)

Second Level – Member Types

FLEXIBLE – can change
with member circumstances

- OPERATIONAL SUPPORT
(default)
- ADMINISTRATION

- OPERATIONAL
(default)
- RESERVE
- OPERATIONAL SUPPORT
- ADMINISTRATION
- CFU

Third Level – Member Roles

OPTIONAL – can have
multiple roles

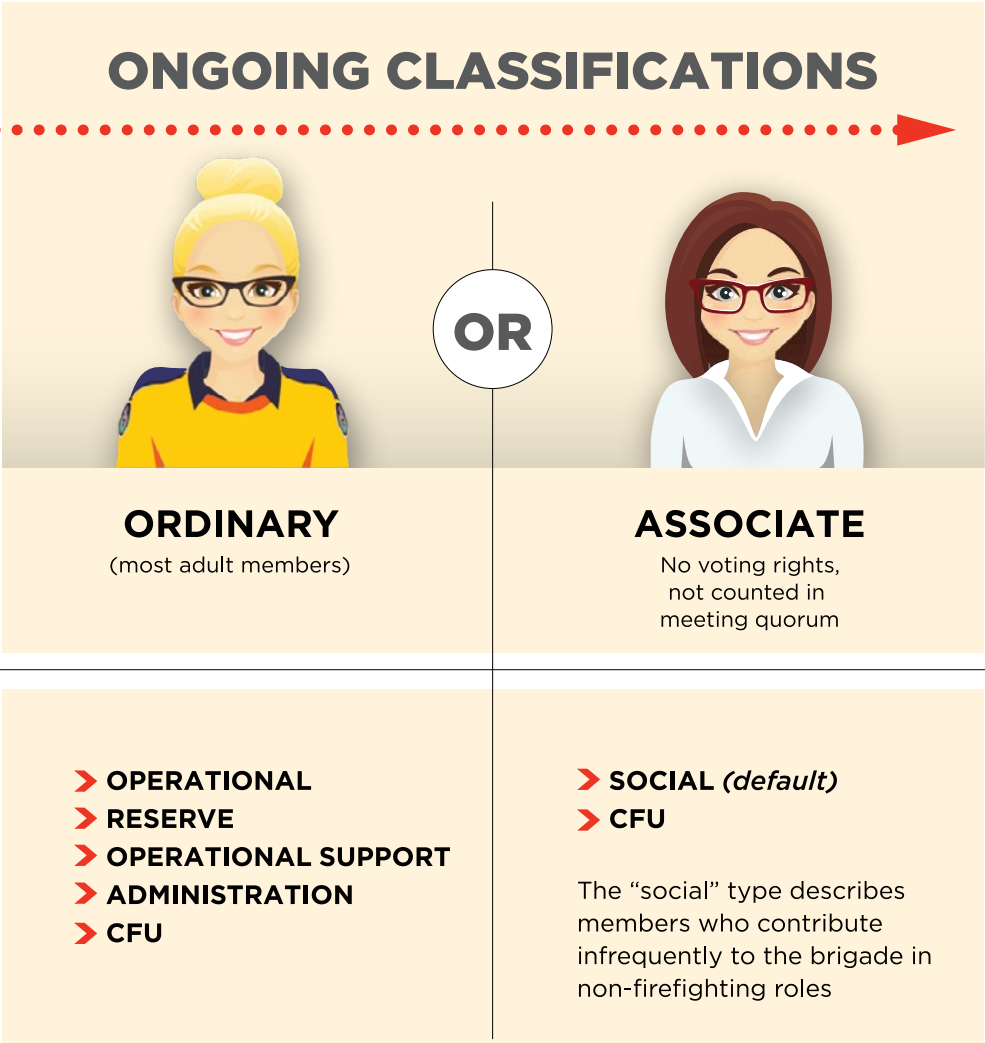
- President
- Vice-President
- Secretary
- Treasurer
- Membership
- Fundraising
- Health & Safety

- Training
- Junior Member Co-ordinator
- Call-out/logistics
- Station Officer
- Equipment Officer
- First Aid Officer
- Catering Officer

Some of the possible roles outlined in the Brigade Management Handbook

Member Classifications

At the right time, the Brigade votes to convert probationary members to one of the ongoing membership classifications. Junior members can apply for ongoing membership when they turn 16 years of age.



How your brigade is structured will define what roles will be needed. *(Is it time to review your brigade structure?)*

For more information about brigade structures and roles, refer to the Brigade Management, Recruitment and Retention resources available on MyRFS.

Sourced from the Brigade Management Handbook, available on [MyRFS.nsw.gov.au](https://myrfs.nsw.gov.au)



< Continued from page 25

also have lots of opportunities to create Brigade Rules and Standing Orders that suit them.

There are 17 areas in the constitution where your brigade can customise the constitution using Brigade Rules, ranging from voting processes to who can vote for roles in the brigade.

In addition, you can also create Brigade Standing Orders. These can cover basic rules about the running and maintenance of the station, or rules about attending training sessions.

Your brigade can decide on criteria for life membership

and decide on the quorum for AGMs. In the new constitution, the default number is 15 percent of members, but you can make it more if your brigade chooses.

The terms of office and voting of field or administrative officers can be varied. Brigades have various procedures for nomination of officers and to establish different voting methods (first past the post/ secret ballot or show of hands/ who can vote). Again, there is a default, one year for every position, but members might vote to change this duration.

The thing to stress is that it's your constitution, so brigade

members are encouraged to think through the brigade's needs and create brigade rules so the constitution will best suit your individual brigade's needs.

How do we go about reviewing the constitution? What does it involve?

Make a brigade rule by holding a brigade meeting. Advise members at least 21 days prior to the meeting of the motion to make a brigade rule. Vote on the brigade rule, 75 percent of ordinary members at the meeting have to agree for the brigade rule to be adopted.

After your brigade has voted

on any brigade rules for your constitution, they need to be reviewed by the district.

Submit the constitution and brigade rules to be posted on MyRFS, so that they're in a place where all members can refer to them.

Remember if you need assistance, there are templates, information packs and videos available on MyRFS or from your district office that can guide you in your discussions.
<https://www.myrfs.nsw.gov.au/InfoAbout/BrigadeManagement/NewBrigadeConstitution.aspx>

GET READY WEEKEND

22-23 SEPTEMBER 2018 4 SIMPLE STEPS TO PREPARE FOR BUSH FIRE



1. DISCUSS

Know what you and your family will do if bush fire threatens your home.

Have a plan.



2. PREPARE

Get your home ready for bush fire season.

Check www.rfs.nsw.gov.au/plan for the 5 actions to make your home safer.



3. KNOW

Be mindful of the bush fire alert levels.

You will find these on the NSW RFS website, on the radio and in the 'Fires Near Me' app.



4. KEEP

Keep the key contact numbers and websites on hand, such as:

Emergency Triple Zero (000)

Bush Fire Information Line:
1800 NSW RFS (1800 679 737)

NSW Rural Fire Service Website:
rfs.nsw.gov.au

Fire Danger Ratings: **rfs.nsw.gov.au/fdr**

'Fires Near Me' Free smartphone app

Local radio, TV and newspapers

facebook.com/nswrfs

twitter.com/nswrfs



GET READY

PREPARE. ACT. SURVIVE.

www.rfs.nsw.gov.au

YOUR HEALTH MATTERS AT THE NSW RFS

Over the past 10 months the NSW RFS has been implementing a health promotion program called Your Health Matters (YHM) to provide health support and education for members.

You might have seen the YHM Quarterly Packs, which contain posters and information, or have attended face to face presentations or undertaken health checks or utilised online platforms.

The Your Health Matters (YHM) program is providing free 20-minute face to face or online health checks to all of our members across the state.

The YHM program supports NSW RFS members in achieving and maintaining optimal health and fitness for their roles so they are able to provide world standard community-based fire and emergency services.

Some of the areas of health and wellbeing that the YHM program have focused on include, keeping hydrated, dealing with sleep issues, monitoring your sugar intake, recognising and coping

with stress, guides to sun safety and dealing with back, knee, neck and shoulder pain.

The focuses of the YHM Plan 2018–19, which you might have seen on myRFS, include healthy eating and support for catering brigades, increased communication of IMSAFER, and the Mental Health Plan 2018–2023.

Look out for the YHM Packs delivered to your Brigade and



other initiatives via our online platforms and MyRFS at <https://bit.ly/2KidQsR>.

Any questions or queries please contact our Wellbeing Specialist healthy@rfs.nsw.gov.au.

ROLLING WITH THE PUNCHES

8 TIPS TO HELP MANAGE STRESS

Published April, 2018

- 1 Take breaks from the stressors**
Whether it's a holiday, a walk out of the office or switching off the emails for an hour, it is essential we give ourselves time to recover from stress.
- 2 Keep things in perspective**
Even when facing very painful events, try to consider the stressful situation in a broader context and keep a long-term perspective. Try to avoid blowing the event out of proportion.
- 3 Move**
Humans are designed to be active. Movement stimulates the brain and body and is essential for good health. Getting active is energising and needs to be a part of every day.
- 4 Smile and laugh**
Our brains are interconnected with our emotions and facial expressions. Don't be afraid to smile or laugh as this can help relieve some of that tension and improve the situation.
- 5 Make space**
Spend some time away from technology. Create a technology free room in your house. Take time out in your favourite scenic spot.
- 6 Sleep**
7+ hours of sleep a night is essential for recovery. Non-pharmacological sleep therapy simply involves getting into a routine, getting up at the same time every day, and ensuring that your limbs cool off as bed time gets close. Letting your limbs cool off prepares your body for sleep, so make sure you don't exercise or have a hot bath close to bedtime.
- 7 Make connections**
Good relationships with close family members, friends or others are important. Accepting help and support from those who care about you and can listen to you strengthens your resilience.
- 8 Accept that change is a part of living**
Certain goals may no longer be attainable as a result of adverse situations. Accepting circumstances that can't be changed can help you focus on circumstances that you can alter.

WHAT IS STRESS?

Simply put anything that stops you from being relaxed, makes your blood boil, heart beat fast or gives you a fright.

NUMBERS YOU SHOULD KNOW

NSW RFS CISS and Chaplaincy 1800 049 933	Beyond Blue 1300 22 4636	Black Dog Institute 9382 4530	Lifeline 13 11 14	Sane Australia 1800 187 263
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NSW RURAL FIRE SERVICE

Content by **VITALITY WORKS**
wellness design studio

To find out more about Your Health Matters, log into MyRFS and go to www.myRFS.nsw.gov.au/InfoAbout/SafetyandWelfare/YourHealthMatters.aspx

SUGAR: THE BITTER TRUTH

Published April, 2018

The World Health Organisation recommends consuming less than*

6 TEASPOONS
Per day

On average, Australians eat*

20 TEASPOONS
Per day

OVER A LIFETIME THIS EQUALS

2.6 TONNE
of SUGAR

(ABOUT THE WEIGHT OF A MALE HIPPO)

Nutrition Information

Serving Size: 12g	Servings Per Package: 20	NET 240g
Qty per Serving Qty per 100g		
Energy	1874J	15600J
Protein	0.2g	1.8g
Fat - Total	0.0g	0.0g
- Saturated	0.0g	0.0g
Carbohydrate	10.7g	89.4g
- Sugars	1.4g	9.8g
Sodium	47mg	391mg
Calcium	31.4mg	261mg
Phosphorus	9.3mg	77.5mg

Aim for 10g or less of sugar per 100g serving.

* Maximum intake of 12 teaspoons (50 grams) per day. Based on updated World Health Organisation guidelines released in March 2015 for adults and children to reduce their daily intake of free sugars to less than 10% of their total energy intake. A further reduction to below 5% or roughly 6 teaspoons (25 grams) per day would provide additional health benefits.
* Australian Bureau of Statistics 2012

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To find out more about Your Health Matters, log on to MyRFS and go to www.myRFS.nsw.gov.au/InfoAbout/SafetyandWelfare/YourHealthMatters.aspx



For the first time the Australian Community Engagement and Fire Awareness Conference was hosted at Coffs Harbour, in Region North. Almost 450 delegates attended, including members of external agencies such as FRNSW, VRA, NSW SES, Tasmania Fire Service, CFA, CFS, QFES and Fire and Emergency NZ.

The theme of this year's conference was "Our People, Our Community" with a focus on developing NSW RFS members and giving them the tools to engage with the communities they protect. The conference was focussed on identifying the complex factors that influence our communities' responses to bush fire, identifying those who are most at risk and creating initiatives that resonate with them more deeply to drive positive behavioural change.

We often see the signs of a resilient community when a major fire threatens. This resilience is in part a result of our volunteers keeping engaged with their communities to ensure they are prepared to face the inevitable fire when it comes.

This year's conference focussed on engaging with specific at-risk communities and saw the launch of the first research-led strategies for engaging indigenous, school and farming communities.

INDIGENOUS COMMUNITIES

The indigenous engagement strategy aims to deliver a program of activities and supporting resources that reduce the risk of fire and other emergencies on indigenous communities. These will be developed and implemented in collaboration and partnership

with indigenous people, elders, traditional owners, Local Aboriginal Land Councils, and NSW RFS members.

A number of attendees at ACEFA commented how welcoming it was feeling the presence of indigenous members across the entire conference. From the opening night when Uncle Mark Flanders addressed the delegates with a Welcome to Country and introduced the local Gumbaynggirr Mob who performed a smoking ceremony and spectacular

dances, to experiencing a cultural burn, to Mark Ella's address on the final afternoon of the conference (above right), indigenous leaders generously gave their time and knowledge. Indigenous fire practitioner and filmmaker Victor Steffensen from North Queensland (below) presented so that delegates could learn about the key features of cultural burning knowledge and the differences that distinguish it from the western understanding of fire.

Some delegates attended the cultural burn led by Darrunda

Wajaarr Rangers in Bruxner Park Flora Reserve and learnt about cool burn techniques and traditional practices.

SCHOOL COMMUNITIES

The NSW RFS recognise how important children are to starting and continuing the conversation about bush fire preparations and community resilience. The NSW Government has acknowledged this in the school curriculum; years 5 and 6 now must study the impact of bush fire on people,





places and the environment. The schools community engagement strategy aims to deliver a program of activities and supporting resources for school communities. These will be developed and implemented in collaboration and in partnership with teachers, students, education authorities, professional associations and NSW RFS members.

The Project Firestorm workshop at the conference gave members the opportunity to design Project Firestorm schools' engagement resources aligned to teacher and student requirements.

FARMING COMMUNITIES

Using local knowledge during rural fires is crucial to effectively fighting fires

and minimising their impact on farming communities. Assistant Commissioner Jason Heffernan introduced the Rural Liaison Officer (RLO) program that is designed to ensure farmers' voices are heard on firegrounds. David Curry, the RLO at the Barradine fires explained how and why this program works in practice. RLOs were deployed to numerous fires across the state this season and received positive feedback from the affected communities.

Farming communities are also very well connected, and experience high rates of volunteering; both are key indicators of community resilience. Empowering farming communities to identify how they can best develop their

preparedness and resilience is an effective approach to community engagement. The NSW RFS are partnered with the Foundation for Regional and Rural Renewal, the Office of Emergency Management and the University of Sydney to develop a new Get Ready Program that takes advantage and supports the unique strengths of each community and turns them into better preparedness outcomes.

As well as looking at engagement strategies with these three communities, there were sessions covering topics such as understanding risky behaviour in the community, the National Fire Danger Rating system, planning for spontaneous volunteers, and Lisa McLeod explaining the

Pappinbarra community's experience of bush fire and rebuilding.

With every major fire, there are opportunities to learn and improve and Josh Whittaker from the BNHCRC provided information from their research about the last fire season (which you can read about elsewhere in this issue of the *Bulletin*). In many respects the NSW RFS are leading the way, both in our research-led engagement strategies and our public awareness campaigns.

The conference also heard about the community's changing expectations for information during emergencies. People are more connected than ever, which brings both benefits and risks should those communications platforms fail. The importance of field liaison and people to people communications were discussed during sessions as well as the convening of a panel of Incident Controllers and Public Liaison Officers from the past fire season. This is a focus area for the service at the moment and lessons learnt will feature in updated training resources being released for next season.

Those who were able to attend the ACEFA conference and have the opportunity to expand knowledge and build networks will have found information and strategies to take back to their own brigade or unit that will help you create more meaningful and effective interactions with your community. ■



Public liaison critical during hazard reductions

Community consultation is an essential component of a successful hazard reduction.

By Adam Streichler, Senior Operational Communications Officer



Before the Jessica Gardens Hazard Reduction (HR) operation took place, the Hornsby/Ku-ring-gai Rural Fire Brigade communicated with local schools and aged care facilities, and undertook a social media campaign to ensure that residents were aware of the upcoming operations. During

the HR, Channel 9 visited the fire ground and reported on how crucial HR burns are for protecting the community and also featured the large joint operation between all agencies involved in the HR burn.

On Saturday 26 May 2018, Hornsby / Ku-ring-gai and

Northern Beaches Rural Fire Districts, in association with Fire & Rescue NSW and the National Parks and Wildlife Service came together to undertake a 109ha hazard reduction in St Ives.

The Jessica Gardens Hazard Reduction was critical to providing protection to over 220 properties as well as to essential electricity and road infrastructure. The HR included a large community interface and bushland adjacent to Mona Vale Road, so it was essential that a public liaison function was included in the Incident Management Team structure.

Senior Deputy Captain Adam Streichler of Westleigh Brigade was appointed Public Liaison Officer, reporting directly to the Incident Controller, and coordinating the community and media liaison functions across the fire ground.

"A Public Liaison Plan for the burn was established prior to the day, which highlighted community assets, potential locations for static information points and resource requirements and we implemented that, alongside Community Field Liaison Officers who were mobile across the HR throughout the day," Adam said.

"It was essential that the community supported the efforts of our crews to undertake this important hazard reduction, sometimes the only way to firm up their support is to be visible and available to the community during these large interface burns.

"In establishing a community liaison team, particularly for a hazard reduction where there are legitimate community concerns relating to the protection of the environment, smoke impact and other factors, the liaison officers need to be outgoing, willing to answer the tough questions and most importantly be a positive representative of the Service" he said.

"National Parks were undertaking the Sphinx Hazard Reduction in North Turramurra on the same day [as the Jessica Gardens HR],

which increased the amount of smoke in the air and this caused an increase in the need to ensure a strong community engagement presence," said Inspector Rolf Poole, District Coordinator for Hornsby / Ku-ring-gai Rural Fire District.

"It was essential for Adam and his team on the day to be visible, engaging and open to all dialogue with the community, particularly because of the increased activity with two HRs occurring in close proximity. The team found that the community were incredibly positive and supportive of our efforts and further appreciated the opportunity to stop and talk with dedicated community liaisons," Inspector Poole said.

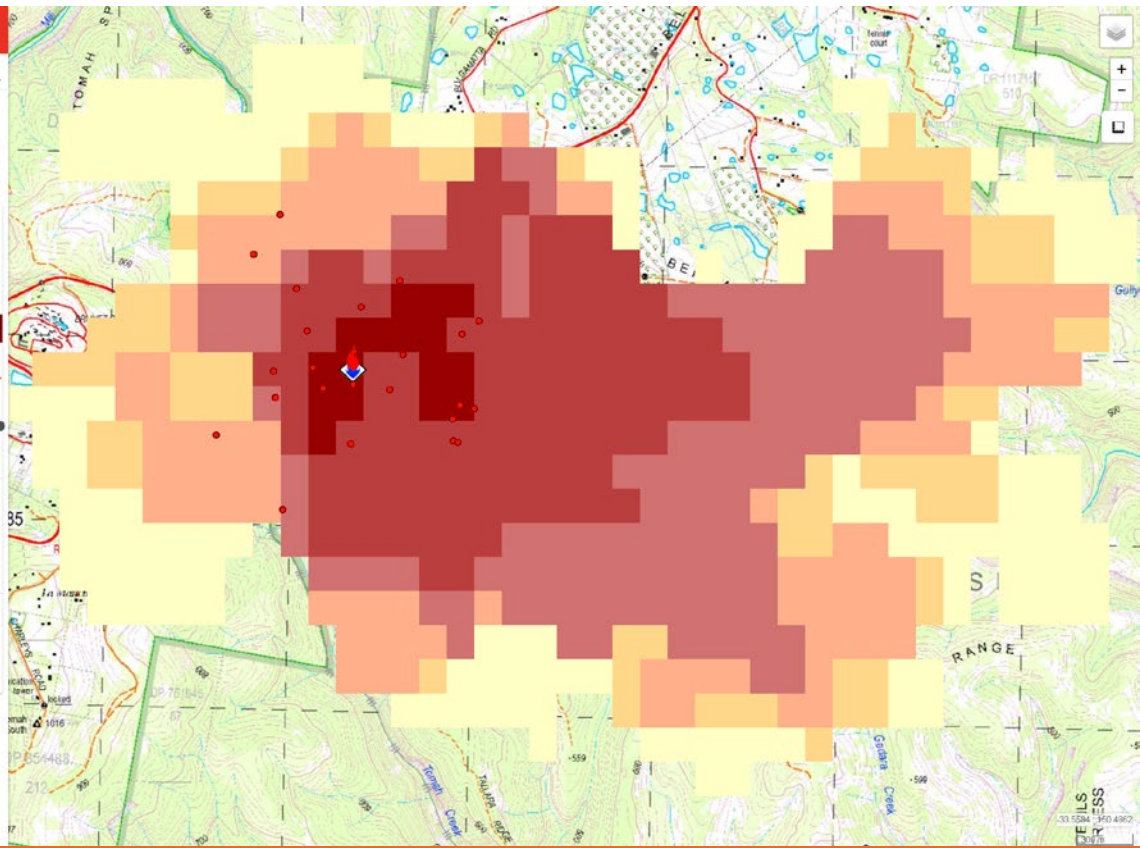
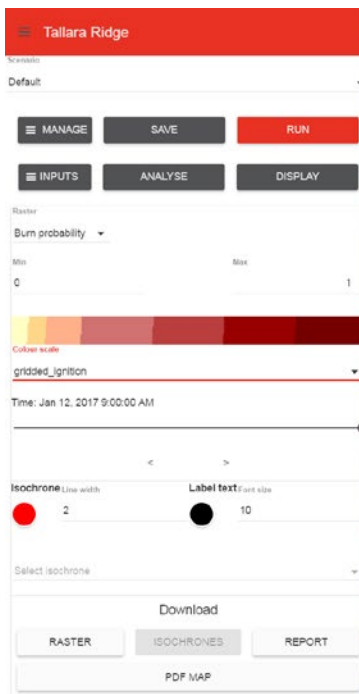
In hazard reductions, as well as community liaison, there is planning around environmental issues as well. For example, prior to a burn at St Ives recently the public wants to know that the HR will be managed in accordance with environmental guidelines.

An environmental assessment is one of the first steps in the planning process for prescribed burns. NSW RFS works closely with other agencies and land managers prior to burning to ensure the environmental matters are taken into account. Prior to a recent burn at St Ives a number of monitored possum boxes were relocated before the start of the burn and were returned at a later date. Indigenous heritage sites were identified and protected. Creek line riparian vegetation zones were excluded from burning. Low to moderate burning techniques were employed to facilitate a patchy mosaic burn, providing fauna with corridors so they could relocate. Prescribed burning operations take months of planning and we thank the community for doing its part.

Hornsby / Ku-ring-gai District hope to include the public liaison function for all large hazard reductions in future due to the success of recent efforts and feedback from the community. ■



Above: Public liaison is crucial when hazard reduction activities occur close to built up areas and infrastructure.



Technology for predicting

The Fire Behaviour Analysis unit has been using two new technologies over the past fire season to improve the monitoring and forecasting of going fires.

The first is imagery from the Himawari-8 satellite. Operational since 2015, this new generation weather satellite gathers images of the entire continent every ten minutes, compared to hourly images for the previous satellite. Himawari-8 is operated by the Japan Meteorological Agency. Data is provided to the NSW Rural Fire Service (RFS) via the Bureau of Meteorology just 15 minutes after collection, allowing near-real time monitoring of fires and smoke columns.

The NSW RFS make use of two kinds of images. The first are visible light images, like a lower resolution aerial photograph with 1 km pixels, which allow us to track smoke plumes from bush fires and prescribed burns, as well as tracking the movement of storms and cold fronts. The second are the so-called "fire band" images which are sensitive to heat released by things such as

fires or hot ground. For large fires, enough heat is released to make the location of the fire glow brightly in the satellite images. The pixels of these images are relatively large, 2 x 2 km, but fires smaller than this can be seen as the heat they release can raise the temperature of the pixel above that of the surrounding pixels.

Fire band images are useful for locating fires and monitoring their behaviour. For remote fires it has often been possible to locate fires that are distant from tracks or land marks by their signature in the satellite image. For major fires the images have been used to track the intensity of fires as they escalate and moderate during the course of the day, or to track the effect of a wind change as it moves across the fire ground.

There are of course some limitations too. The large pixel size means that some small

fires are not visible, particularly surface fires in forests. There is also a tendency for the smoke column to glow in the images, exaggerating the size of a fire. Finally, hot ground in the western parts of the state can often reach temperatures that make it appear as though the whole state is on fire, with the fire signal lost in the background heat.

The NSW RFS is working with university partners at the Bushfire and Natural Hazards Cooperative Research Centre to develop methods to improve the information we get from the Himawari-8 images, including reducing the fire detection resolution to 500 metres and better distinguishing hot ground from going fires.

Ensemble fire prediction

To better understand the potential for new fires to spread, the Fire Behaviour

Analysis unit has started using ensemble predictions of fire behaviour. Rather than trying to make a best estimate of fire spread, an ensemble takes a large number (typically 25-100) of predictions and combines them together to estimate where a fire is mostly likely to spread but also where it might spread given the right conditions. Each prediction within the ensemble differs slightly from all the others in terms of the fire location, the weather forecast used, and the fuels burned, to take into account the fact that there are always uncertainties about these important inputs into the fire spread prediction.

Because many individual predictions are required for an ensemble, this method is used only for computer simulations made using the Phoenix fire simulator.

The Phoenix fire prediction tool works by analysing relevant data such as point of fire ignition, weather conditions, topography and start time to make predictions of fire spread.

It also takes into account moisture content, fuel load and vegetation types drawn from state-wide fuel maps. Phoenix also predicts flying embers which can start spot fires ahead of fire fronts.

As soon as a fire incident is reported, a quick ensemble prediction for the next 24 hours is made and displayed in a web page for the Supervisor

Fire Behaviour Analysis, usually within five minutes of the fire being logged. This allows a quick appraisal of the potential of the fire and assists the Supervisor to triage incidents and assign them to Fire Behaviour Analysts for more in-depth predictions. With manual predictions taking around an hour to complete, and dozens of fires starting on a busy day, triage is vital.

Over the past fire season over 500,000 automated predictions were made.

The Fire Behaviour Analysis unit can also make ensemble predictions for use by Incident Management Teams, which are provided with interpretation of probabilistic outputs. These include “gridded ignitions” which vary the location of the fire when its location is not

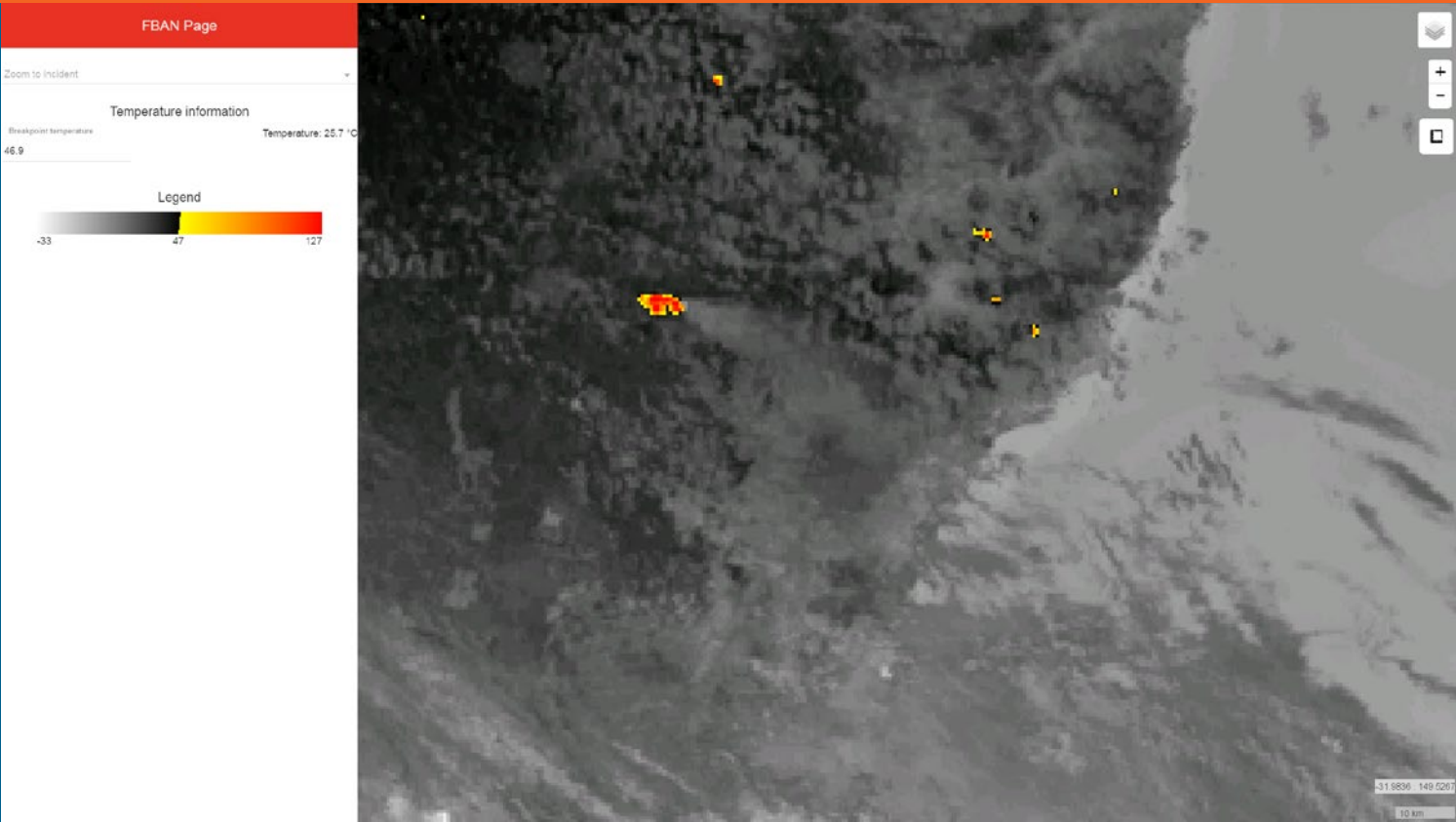
known exactly, or “breakout scenarios” used when a fire which is behind containment lines has the potential to spot out of control but the location of the breakout can only be anticipated approximately.

Please contact the Fire Behaviour Analysis team if you’d like more information on fire prediction products for Incident Management Teams. ■

Below: A Himawari-8 fire band image of NSW showing areas of active fire, coloured yellow and red. Cooler cloud tops and smoke plumes show up as light-grey. **Left:** The result of an ensemble fire prediction for a newly reported fire. Red areas are predicted to burn in all simulations while orange and yellow areas are less likely to burn. The prediction does not take into account suppression efforts. Screenshots supplied by Stuart Matthews.

fire behaviour

By Stuart Matthews,
Senior Fire Behaviour Analyst





Research gives insight into community bushfire response

By Dr Josh Whittaker, Bushfire and Natural Hazards CRC and the University of Wollongong and Dr Mel Taylor, Bushfire and Natural Hazards CRC and Macquarie University.

In January and February 2017, New South Wales faced some of the worst bushfire conditions ever forecast for the state, including Catastrophic fire danger ratings for many communities.

During this time, a number of large and damaging fires occurred, but fortunately no human lives were lost during the worst of the conditions.

Following the fires, the New South Wales Rural Fire Service (NSW RFS) commissioned the Bushfire and Natural Hazards CRC (BNHCRC) to conduct research into community preparedness and the responses by affected communities.

The research involved interviews with people affected by the Currandooley, Sir Ivan and Carwoola fires, and an online survey of residents in bushfire risk areas throughout NSW.

THE FIRES

The Currandooley fire was caused by a bird making contact with a high voltage powerline and landing in dry grass. Under Severe fire danger conditions, the fire destroyed a house, sheds and two vehicles. Around 200 sheep and cattle were lost.

The Sir Ivan fire ignited from lightning strikes near Leadville, and burnt under Catastrophic fire danger conditions, destroying 35 houses, over 50,000 hectares of land and many agricultural assets such as livestock, fences, pasture and machinery.

The Carwoola fire destroyed 11 houses around 20km south east of Canberra. It was caused by sparks coming from a metal cutting wheel, and burnt under Severe fire danger conditions.

The research involved interviews (113) with affected residents, and an online survey completed by 549 people threatened or affected by bushfires throughout NSW in 2017.

WHAT THE RESEARCH FOUND

Information and warnings

A majority of survey respondents found warnings easy to understand, up-to-date and useful.

Participants expressed a preference for highly localised information. Survey respondents most often identified the “Fires Near Me” smartphone application and website as their most useful information source.

“Fires Near Me” was seen as easy to understand (88 per cent), useful (82 per cent) and sufficiently localised (76 per cent). Two-thirds felt the information was up-to-date. Interviewees commonly expressed strong support and a high degree of satisfaction with the “Fires Near Me”.

Landline telephone warnings were more often seen as useful when compared to SMS warnings, (78 and 67 per cent), up to date (72 and 66 per cent) and timely (68 and 66 per cent). Nevertheless, survey respondents most

often identified SMS as their preferred mode for delivery of warnings. Limited mobile phone coverage, particularly in the Sir Ivan and Currandooley fires, meant that some people did not receive SMS warnings.

Catastrophic Fire Danger warnings

After the 2009 Black Saturday fires in Victoria, the fire danger warnings were revised nationally and "Catastrophic" was introduced as the highest level of fire danger. This was only the second time large population centres in NSW had been subject to Catastrophic fire danger ratings since their introduction.

Eighty-eight per cent of survey respondents considered Catastrophic fire danger warnings to be easy to understand, 83 per cent found them timely and 78 per cent found them useful. The research shows that some people may underestimate the risks to life and property if the fire danger is not Catastrophic.

Receipt of an official warning about Catastrophic fire danger prompted survey respondents to discuss the threat with family, friends or neighbours (63 per cent) and look for information about bushfires in their area (62 per cent).

Equal proportions began preparing to defend or leave (39 per cent) and a smaller proportion (12 per cent) left for a place of safety.

When asked what they would do next time they received a message about Catastrophic fire danger, 12 per cent of survey respondents said they would leave before there is a fire and 24 per cent said they would wait until a fire started, then leave. Twenty-seven per cent reported that they would get ready to stay and defend, while nearly a quarter said they would wait for a fire before deciding what to do.

Interviews with people affected by the Carwoola and Currandooley fires suggest that some people underappreciate the risks to life and property on days that are not Catastrophic.

In contrast, some interviewees affected by the Sir Ivan fire did not anticipate the size or severity of the fire, despite forewarning of the Catastrophic fire danger they would experience. Many felt that they were prepared to respond to smaller fires, which were more common in the area.

Public expectations of fire services

It is generally well understood that there are resource constraints during major fires (e.g. "there are not enough fire trucks for every property"). However, there is less appreciation of the operational constraints of large and dangerous fires, and that often it can be too dangerous for firefighters to directly attack the fire front.

Most interviewees affected by the Currandooley and Carwoola fires praised the efforts of firefighters and did not expect to receive personal firefighting support. Residents in Carwoola were particularly cognisant of the limits of support from fire agencies, a message that had been clearly communicated by the local brigade over time.

Some interviewees affected by the Sir Ivan fire were more critical of the firefighting response. Criticisms were varied but centred on the perceived lack of firefighting in the agricultural lands between Leadville and Cassilis.

Some saw the fire service as overly bureaucratic and risk averse. These criticisms reflect a mismatch in expectations and should be viewed in the context of a large, destructive bushfire that burnt under Catastrophic conditions, where there was limited operational capacity or opportunity to deal with such fires due to dangerous conditions.

Conclusion

This research is now being used by the NSW RFS to put in place new processes to better liaise with communities during major fire events, as well as to further strengthen its approach to public information through websites, smartphone applications and face-to-face communication.

The research confirms the tendency for people to wait and observe the fire directly

before getting ready to defend themselves or confirm the need to leave. This behaviour presents opportunities for emergency service personnel to meet people at a time when they are seeking and receptive to information and advice.

While there is strong appreciation for the danger of fires under Catastrophic conditions, there is a need to more clearly communicate the risks posed by fires burning under non-Catastrophic conditions. Such messages could be incorporated into community education and engagement resources, as well as emergency warnings and information.

There is a need to more clearly communicate the limits to response capacity. In addition to limitations due to resource constraints, which are generally well-understood by the public, there is potential for enhanced communication about the dangers large and fast-moving fires pose to firefighters and that it can be too dangerous for direct attack on the fire front.

Find out more about this research at: bnhcr.com.au/publications/2017nswbushfires

Left: The aftermath of the Sir Ivan fire in February 2017.

Bottom: An aerial shot of the Sir Ivan bush fire.



Choosing the right message to keep people safe

The way the NSW RFS educates and engages the community on fire safety has changed over the years to a modern, research-based approach of raising awareness and changing behaviour.

The NSW RFS has seen the value in public awareness campaigns for many decades – even from the days of the Bush Fire Council. Over the past century, fire safety messages featured characters like Smoky the Koala and war-time messages of defending the nation from the threat of fire.

Today, fire safety campaigns have become more sophisticated and targeted – moving from general messages about the general risk of fire across the landscape, to using

research and the insights from people who have lived through bush fires.

The NSW RFS commenced its first significant and modern public awareness campaign in 2009, following the Black Saturday bush fires in Victoria. With the introduction of new bush fire danger ratings, alert levels, and the development of the new Bush Fire Survival Plan, there was a need to quickly communicate these changes to the community. It started a new approach to

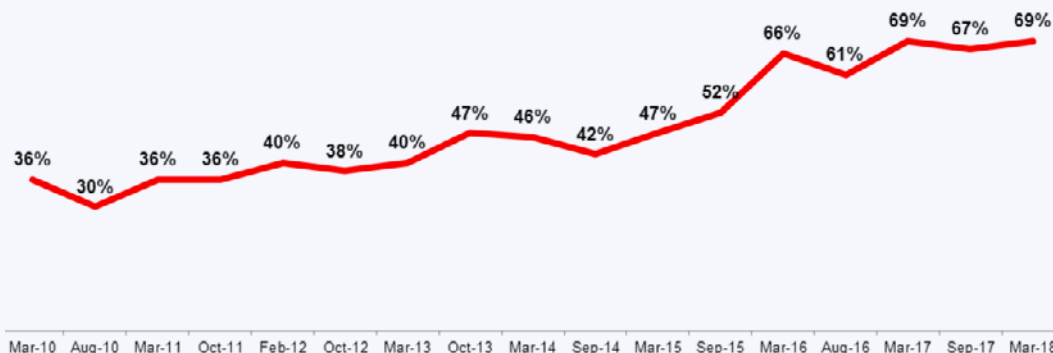
advertising by the Service, which has seen a huge shift in the levels of planning and preparation in the community.

Research at the end of the campaign found that while the majority of people knew they should have a bush fire plan, most would put it off, thinking a fire wouldn't happen to them. It was from this insight that the "Planning to make a plan is not a plan" campaign was developed. The campaign commenced in 2012.

Then, following the fires of 2013, research was conducted in areas like the Blue Mountains, Southern Highlands, Coonabarabran and Port Stephens. One of the key highlights of this research was that while people appreciated the risk of fire to the area in which they lived, they didn't personalise the risk of fire. Through the personalisation of fire, the "I Am Fire" campaign was developed.

Now, the campaign has concluded – and since the





Left: Graph showing overall percentage of increase of number of people with a Bush Fire Survival Plan in place since March 2010.

Bottom: Advertising posters over the last century.

inception of targeted public awareness campaigns over the past decade, people's level of bush fire planning has risen from around 30 percent in 2010 to 69 percent in early 2018.

"We've now hit a turning point in the way we communicate fire risk to the community," explains Anthony Clark, Director of Corporate Communications.

"A decade ago, if you had thought about what to do during a fire, you were in the

minority – now, you're in the minority if you haven't planned.

"However, we know the job isn't done yet. We know that if you scratch the surface, people often haven't thought through their plan properly, such as when they'll leave, what they'll take, or what they'll do with animals. That's the big focus moving forward".

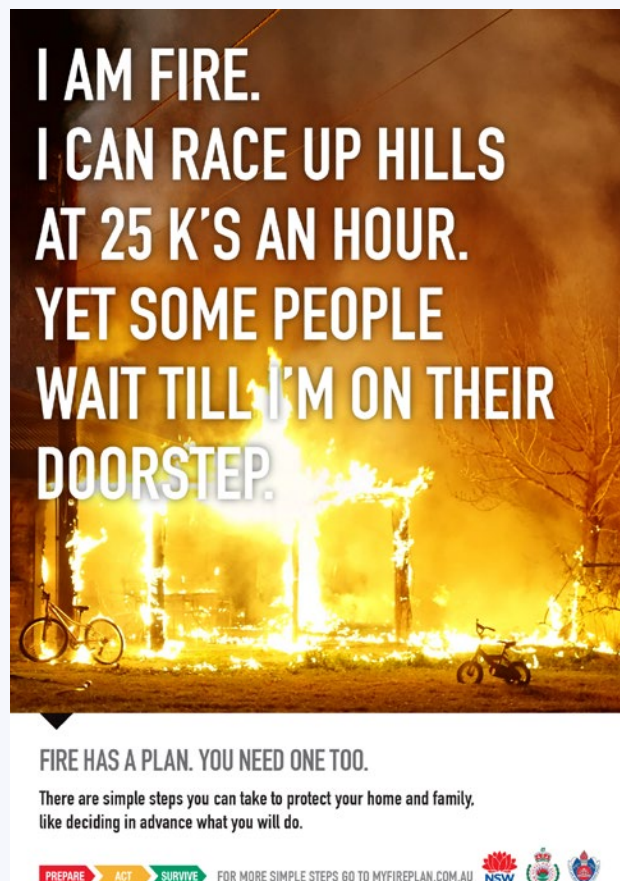
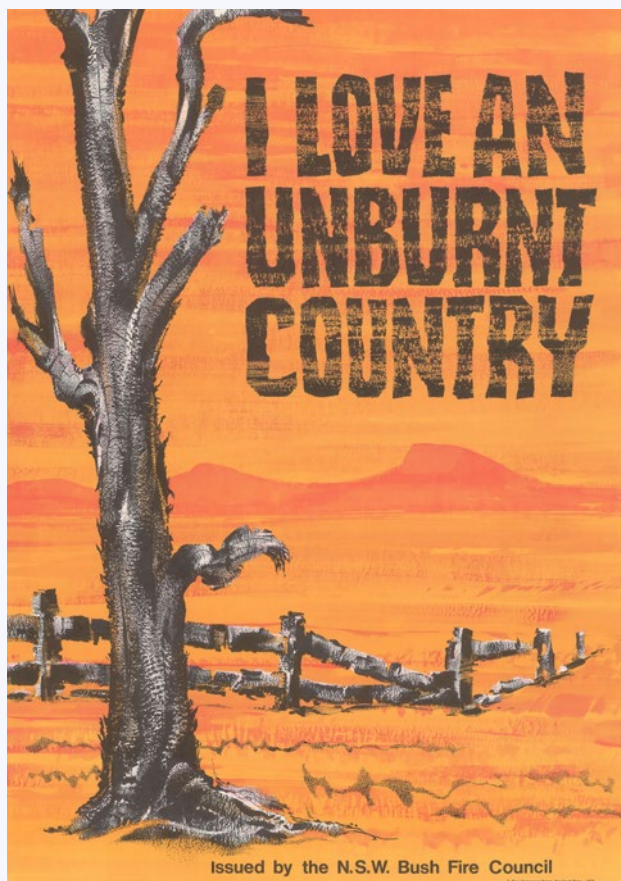
A new campaign is in development for the 2018–19 fire season and beyond, focusing on the concept

of improving the quality of people's planning and preparation.

"If the majority of people have at least thought about what to do, let's get them to question whether they've really thought it through".

From September, you can expect to see the new campaign on television, social media, in newspapers, on radio and outdoors – asking the question "How Fireproof Is Your Plan?".

The campaign will be supported by specialist community engagement tools, including an updated MyFirePlan.com.au website, and will tie in with this year's Get Ready Weekend on 22 and 23 September.



At your service...



In the centre of the NSW Rural Fire Service headquarters sits our very own library, which holds over 10,000 books, reports, DVDs and journals, and all are available for you to use. The library is staffed by a full-time librarian who builds and maintains the library collection and is there to assist you with your library queries.

The collection has grown over the years from focusing on our bush fire history, training resources and incidents to now providing members with a broad range of resources. There is material readily available on mental health and physical wellbeing, leadership and management, ecology and meteorology, mapping, adult education and emergency management.

As a member of the NSW RFS, you can borrow from the library free of charge. The library pays the postage, and includes reply paid envelopes, to send books or articles across the country to meet the loan requests from our members. Each month the library loans out on average 65 books and provides even more journal articles.

WHO USES THE LIBRARY?

Our number of users have grown as well. We now have over 2,000 registered borrowers. NSW RFS members are not our only library users. More and more people are learning about the library and we actively promote it to the public. The library now receives requests externally from both individuals and organisations, such as government departments, education centres ranging from universities, secondary schools, primary schools right through to childcare centres. The librarian is regularly contacted by researchers working with emergency services nationally and internationally, and members of the public interested in bush fire information.

Some requests are straight forward, but others require our librarian to research across numerous sources to provide reference material to answer users' queries. In the last year the library had over 3,000 requests for information including topics such as: the effects of smoke on agricultural businesses; decision making under stress; emergency services exercise planning; office and building design; weather and climate change; and national and international fire incidents. The library also helps with information for brigades who are celebrating anniversaries.

THE NSW RFS LIBRARY ONLINE

Increasingly, people look for and read information online and the library has adapted to this with

subscriptions to online journals, digital magazines and eBooks. However, physical books are still very popular and our collection of books is growing. To assist users to get information easily, the library built a new website in 2014. The website is accessible to the public, so there is no need to log on to MyRFS to use it. The website is a one-stop site for finding items in our online catalogue, requesting loans, looking at online magazines and keeping up to date on what's new to borrow in the library. On the website you will also find links to useful websites for topics such as inquiries and coronial inquests, fire and emergency sites, and the NCC Construction Codes, among others.

The library website is <http://nswrfs.intersearch.com.au/>

The NSW RFS library



THE BUSH FIRE BULLETIN ON TROVE AND "LIBRARIES AUSTRALIA"

An exciting initiative occurred in 2016 when the National Library of Australia digitised the entire collection of the NSW RFS magazine, the *Bush Fire Bulletin*, which has been published since 1952. It is one of the first complete journals the National Library has chosen to digitise and it allows anyone in the world to access our journal articles online through TROVE. The library website also provides a portal to search the *Bush Fire Bulletin* on TROVE so you can delve through the contents of over 60 years of our *Bush Fire Bulletin*.

You can also access TROVE through the National Library of Australia's website by visiting <http://nla.gov.au>

The NSW RFS library is working on another major project to share our resources by entering our collection records into the "Libraries Australia" database. Once

this is done, all libraries across Australia will be able to view what is held in the NSW RFS Library collection. The NSW RFS collection is unique, and is considered the largest collection of bush fire resources internationally, so each item is being entered into the database individually.

EBOOKS AND DIGITAL MAGAZINES

The library has two online collections that are available for members to use. Our eBook collection is small but growing. It focuses on the same subjects as our hardcopy collection; in fact many of our eBooks are also available to borrow as hardcopy books – you decide which format you prefer. Popular titles in our eBook collection include Stephen Pyne's *Burning Bush: A Fire History of Australia*; the latest edition of *Essential Bushfire Safety Tips*; *Flammable Australia* published by CSIRO; our most borrowed book *Incident Management in*

Australasia; and the text book *Kirk's Fire Investigation*. We also have eBooks that don't focus on fire. These include *Managing Projects*, *Emotional Intelligence 2.0*, *Professional Writing* and Michael Mosley's bestsellers *The Fast Diet* and *Fast Exercise*.

Our digital magazines subscription to "Flipster", as part of our health and safety initiative, gives access for all members to five magazines online – *Good Health*, *Men's Fitness*, *Women's Health & Fitness*, *Popular Science* and *Australian Geographic*. In the last 12 months, NSW RFS members used the collection over 1,600 times to read the magazines.

It is easy to get access to these online collections; simply email or phone the library and we will send you a password-embedded link to use on your computer.

Because certain topics in our library are asked for regularly, the librarian has compiled online lists to make it easy for

our members to find relevant titles. These lists are found near the top of the library website, and include:

- health and fitness collection
- women and success
- writing reports and business documents
- learning and development

WOULD YOU LIKE TO USE THE LIBRARY?

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We'd love to welcome you as a member of our library. ■

New infrastructure out west

The NSW RFS is proud of the state-wide infrastructure program that provides the facilities that enable our brigades to do work to keep their communities safe.

Eighty-three percent of the NSW RFS's allocated infrastructure funds are spent outside the Sydney basin. Since 2012-13 across Region West more than \$28million has been invested into building projects improving the infrastructure available to our members.

In the Canobolas zone alone, there have been 34 new projects: 21 new buildings and 13 extensions where a meeting room, toilet facilities and a kitchenette have been added to an existing station.

There were 20 new standard design stations and a new State Mitigation shed. New stations already opened are: Barryrennie, Merriganowry, March, Borenore, Byng/Emu Swamp, Springside, Cudal, State Mitigation Shed in Orange, Red Hill, Wattamondara, Chaucer,

Mandurama, Spring Hill. And, in various stages of completion are Clifton Grove, Lidster, Moorbel, Wyangala, North Bangaroo, Cumnock, Milburn Creek and Cumnock.

As well as providing much needed facilities to our members, this construction is an enormous boost to local economies.

Canobolas Zone has an excellent relationship with the local councils of Blayney, Orange, Cabonne and Cowra and by agreement, engaged an external project coordinator to manage the process. Utilising local contractors from the Central West to undertake the works in accordance with the councils' procurement policies, the outcome was the delivery of a series of outstanding facilities for our volunteers.



We are also achieving cost savings that allow a 3B Station to be built for approximately \$260,000 and a 2B Station for \$240,000. This has allowed us to upgrade twice as many brigades from the available budget allocation.

A further 13 brigades had extensions in facilities to include meeting rooms, kitchenettes and toilets.

While these extensions don't usually come with the fanfare of a new station opening, additional facilities, however modest, can play a large role in a local community. Sometimes the greatest impact to communities can come with increasing the amenities of a small brigade shed, so that a brigade can provide food from a small kitchenette and provide bathroom facilities at their meetings and welcome new members or conduct their training and brigade business in comfort.

These 13 brigades are: Mullion Creek, North West, Rivers, Mount McDonald, Gooloogong, Kangaroo Flat, Lyndhurst, The Ponds, Kings Plains, Billimari, Neville and, in progress, are Wallis Islands and Yeoval.

Superintendent David Hoadley of the Canobolas zone said "When we upgrade facilities it brings out more enthusiasm from volunteers towards the brigade – for example when Springside opened, membership increased by 24, which is a significant boost". ■





Australian Fire Service Medals 2018

The Australian Fire Service Medal (AFSM) is awarded for distinguished service by a member of an Australian fire service. The AFSM was introduced in 1988 and replaced the Imperial awards of the Queen's Fire Service Medal for Gallantry and Queen's Fire Service Medal for Distinguished Service. Congratulations to the thirteen AFSMs that have been awarded in 2018 for the Australia Day and Queen's Birthday honours announcements. You can read the full citations on the NSW RFS website:

<https://www.rfs.nsw.gov.au/news-and-media/general-news/australia-day-2018-australian-fire-service-medals>

AUSTRALIA DAY 2018 AFSMs

CAPTAIN NEAL COOMBES

**North West Zone,
Region West**

Captain Neal Coombes joined the Coonamble Headquarters Brigade on 18 December 1986, has served as the brigade Deputy Captain from 2003 to 2005, and in 2005 he was elected Senior Deputy Captain. He has also held other roles with the Coonamble Headquarters brigade including the role of Training Officer and President and assisted with Coonamble FCC regularly. In 2011 Neal was made a Life Member due to his tireless dedication to the brigade and was Group Captain for the North West Zone 2006 to 2015.



FIREFIGHTER DAVID ROBERT CORDERY

Hornsby - Region East

Firefighter David Robert Cordery has been a member of the Rural Fire Service for 60 years. His primary brigade has been Ku-ring-gai. He was a dual member, first with Belrose, then with Hornsby/Ku-ring-gai Support Brigade. David was an active contributor to the shaping of the Ku-ring-gai Brigade structure and culture. He has held numerous roles including Captain, President for 16 years, Senior Deputy Captain, Deputy Captain and Secretary. David was one of the primary leaders of the brigade that have guided its evolution from its community origin in to the professionally trained brigade of today.



GROUP CAPTAIN MARK CHARLES HOSKINSON

**Bland/Temora,
Region West**

Group Officer Mark Hoskinson joined the Kikoira Brigade in July 1979 and has demonstrated his leadership as Deputy Captain, Captain, Deputy Group Captain and Group Captain.

Mark manages local and out of area crews, aircraft, heavy plant and provides timely reliable information to the Incident Management Team. Mark has excellent leadership skills and continually demonstrates his professionalism, resilience and commitment to the Service by representing volunteers on the Senior Management Team and the Bland Temora Zone Bushfire Management Committee and by attending Senior Management Team meetings, Group Captain/Captains forums, annual group equipment inspections, brigade annual general meetings, pre and post season Captain's meetings and after action review debriefings.



**FIREFIGHTER AND INSPECTOR
MARK CHRISTOPHER MURPHY**
**Liverpool Range,
Region North**

Inspector and Firefighter Mark Murphy officially joined the Gaspard Brigade (now part of Wallabadah District Brigade) in 1973 and was Captain of Gaspard from 1989–1995. He was Fire Control Officer with the Quirindi Bush Fire District and today holds the position of Deputy Fire Control Officer (and 2IC) for the Liverpool Range Zone.

Mark donates hundreds of hours training volunteers in all aspects of firefighting as well as spending equivalent hours around the state and interstate in various Incident Management roles. He continues to foster a close working relationship between RFS staff, volunteers and other agencies with his continued support of the Liverpool Range Bush Fire Management Committee, Local Emergency Management Committees and NSW RFS/ RFSA Consultative Committees.



**GROUP CAPTAIN
PAUL JAMES REARDON**
**South West Slopes Zone,
Region West**

Group Captain Paul Reardon has been an active member of the NSW Rural Fire Service for 54 years since joining the Bungendore Brigade in 1963.

Paul has been Group Captain for the past 14 years within the South West Slopes Zone at Boorowa and as Deputy Group Captain for the previous six years.

Paul has worked in supervisory roles at numerous fires within the South West Slopes and has undertaken leadership roles at out of area incidents.

Paul has played a leadership role in the development of the South West Slopes Pre-Incident Plan and has focused on building strong relationships between Local Government and the NSW Rural Fire Service while always encouraging the best outcome for volunteer members.



**SENIOR DEPUTY CAPTAIN
RONALD SMITH**
Mid Coast, Region East

Deputy Captain Ronald (Ron) Smith joined the Oakville Bushfire Brigade in 1956.

The fire station was situated on the Smith family farm and the fire appliances were a farm truck which carried a 1,000-gallon tank and a Model T Ford which carried knapsacks. He was a member of the Windsor Civil Defence (now SES) during the 1960s, in particular with the boat rescue crews.

In 1976 Ron joined the Kenthurst Brigade and served as Deputy Captain 1980–1983 and 1990–1992, Senior Deputy Captain 1983–1986, Captain 1986–1990, and President 1997–2000. In 1992 he was elected Deputy Group Captain.

Though Ron retired from active service with the Kenthurst Brigade in 2003 and moved to Hallidays Point, he joined the Diamond Beach Brigade and is currently a Deputy Captain.

He was Deputy Group Captain for the Taree Manning Valley District 2007–2016. Ron has dedicated many years to the NSW Rural Fire Service.



**GROUP CAPTAIN
PETER JAMES WYKES**
Orana, Region West

Group Officer Peter James Wykes joined the Euchareena Brigade in 1976 and has completed just over 41 years of service.

He held the position of Senior Deputy until October 2000 when he was elected Deputy Group Captain for the Southern district of Wellington Council area.

In 2009 and again in 2014 Peter was elected as a Group Captain in the Orana Team, a position he still holds. He has had many appointments as the Divisional Commander on large fires and Section 44 incidents.



The Australian Fire Service Medal (AFSM)

is a circular copper-nickel medal. It is ensigned with the Crown of St Edward. The obverse displays an image of the Queen superimposed over a seven-pointed star of flames. The reverse is inscribed with the words 'Australian Fire Service Medal', and 'For Distinguished Service' on a background of flames.

QUEEN'S BIRTHDAY 2018 AFSMS



GROUP CAPTAIN GEOFFREY ANDREW

Burra Rural Fire Brigade, Burra

Mr Andrew joined the Burra Rural Fire Brigade in 1976 and has remained an active member of the brigade. Holding various positions from 1996, including Group Captain and Deputy Group Captain, he has demonstrated leadership during firefighting operations, training, support for administration of brigades, asset maintenance and leading strike teams. He has also spent many hours in-flight providing fire intelligence to station operations and the local fire control centres.

As a Group Captain, Mr Andrew has been a long-term member of the local senior management team and has also given valuable input and advice as a member of the State Consultative Committee on engineering matters and has served on the Rural Fire Service Association.



GREGORY INGERSOLE OAM Englinton Brigade, Englinton

After joining the Englinton Brigade in 1977, Mr Ingersole fulfilled numerous roles including Group Officer, Chainsaw Operator, Instructor/Assessor and Fire Investigator. He has been Senior Deputy Captain for many years. He has enjoyed many hours restoring a 1920s Dennis fire engine which now holds pride of place at the Englinton Station and is used at many community events around the Bathurst district. He designed and built the Chifley Community Engagement trailer and other displays. He has also built a hot fire trailer, the first of its kind in NSW, which is used regularly for training. He was the founding member of the Chifley Cadet Program and the then Bathurst Regional Training Committee and is currently the Chair of the combined Chifley/Lithgow Training Committee.



GROUP CAPTAIN ERIC SHANKS, Terramungamine Brigade, Dubbo

Mr Shanks joined the Terramungamine Brigade in 1965 and during his period of service with the brigade he has served as Captain (for 24 years), Deputy Captain, Permit Officer and President. Since 2009 he has been Group Captain and has managed many major incidents. He is well respected by volunteers and members of the community and as a member of the Senior Management Team he provides valuable input on management and development across the team.



SENIOR DEPUTY CAPTAIN MARTIN HARRISON

Coonamble Headquarters Brigade, Coonamble

Mr Harrison joined the Coonamble Headquarters Brigade in 1996 and served as Deputy Captain 2009–2013 and Senior Deputy Captain since August 2013. He is a current member of the North West Zone District Training Team. He has regularly participated in out of area and interstate deployments. His contributions are many including assisting with the annual Roads and Maritime Service appliance inspections for the Coonamble Shire and myriad roles at the Fire Control Centre and with the organisation and running of Zone exercises. Mr Harrison's dedication and level of commitment to his local community reflects the values and standards of the NSW RFS.



GROUP CAPTAIN NEALE MUTTON Bolwarra-Largs Brigade, Bolwarra

Mr Mutton has provided distinguished service to the NSW Rural Fire Service for over 40 years since joining the Bolwarra-Largs brigade as a volunteer fire fighter in 1977. Between June 1982 and June 1994 he was Captain and has also held the positions of Deputy Captain, Permit Officer and Brigade Training Officer.

From 1995–2001 he undertook the position of Honorary Deputy Fire Control Officer for the Maitland Fire Control Centre, then continued in the same role in a temporary capacity until 2003. In 2003 he was elected as Deputy Group Captain, then, in 2004, Group Captain, a position he still holds in the Lower Hunter Zone.

His experience and calm manner on the fire ground have seen him lead many strike teams and within the Lower Hunter Zone he has been the divisional commander for many S44 fires. While Group Captain he has proactively engaged in mentoring and training of other group officers and brigade leaders in the Hunter area.



CAPTAIN PETER SHEARER Wilton Brigade, Wilton

Mr Shearer has been a volunteer of the NSW Rural Fire Service for over 49 years, joining the Wilton Brigade in 1968, and holding various leadership positions including Deputy Captain, Senior Deputy Captain and Captain as well as attaining his Group Leader qualification. He has served as a Divisional Commander and Sector Leader in many local campaign fires.

He has also served on the local district advisory committees including the Group Officer Election committee, Health and Safety committee and the District Training Committee. He was instrumental in obtaining new equipment for the brigade, raising funds, donating his time, equipment and materials for the site preparation and erection of the new brigade station started in 1992, and extended in 2004, and again in 2017. He has mentored and encouraged local youth to become brigade members and has championed women's involvement in the brigade.



Young members' excellence

The 2018 NSW RFS Young Leader Scholarship was awarded to Hannah Redman from Ridgeway Brigade (Lake George District). As part of her award, she completed an 11-day voyage on the STS *Young Endeavour*. This experience increases self awareness, develops teamwork and leadership skills and creates a strong sense of community responsibility among the members of the young crew.

Hannah had to learn new skills and take on significant responsibility as part of her experience: "The most challenging part was definitely on the one day when we take over. I was nominated as navigator for the youth crew. I had to get the ship from point A to point B ... I had to map points out on the chart and go through the navigation plan to get to those points."

Hannah said her experiences on the STS *Young Endeavour* will help her as a brigade member. "There is so much teamwork involved to make a ship run smoothly and it's the same with a brigade."

You need a lot of teamwork to be an effective firefighter and ... [I'll be] bringing back the communication that I've learnt and all the brand new things to do with teamwork that I've learnt from all the staffies especially... I'll bring all that back to the brigade."

They sailed back in to Sydney Harbour on 26 April. Hannah was presented with a certificate by Lieutenant Commander Mike Gough, Commanding Officer of the STS *Young Endeavour*, and Executive Director of Membership and Strategic Services Bronwyn Jones PSM.

There was a very strong field of applicants for the Scholarship. Tim Honner from Willow Tree Brigade in the Liverpool Range District was awarded runner-up. Patrick Rankmore from Curlewis Brigade, also in the Liverpool Range District, received a Highly Commended Award for his excellent application. In recognition for their efforts, Tim and Patrick attended the 2018 National Volunteering Conference.

The regional winners were Daniel Purnell from Alphadale Brigade, Northern Rivers District in Region North; Brendan Kingdom from Lake Albert Brigade, Riverina District

in Region South; Lachlan Sutherland from Gulgong Brigade, Cudgong District, Region West and, from Region East, Ivana Marinov from Hillside Brigade, Hills District.

During National Volunteer Week, Minister for Emergency Services, Troy Grant announced the winners of the 2017 NSW Rural Fire Service and NSW State Emergency Services Cadet of the Year and Young Volunteer of the Year Awards.

The event held at Parliament House, recognised the outstanding achievements of Cadet of the Year Anthony Coan, former student of the

Carenne School, Bathurst, NSW RFS Young Volunteer of the Year Jack McQuellin (12–15 years) from Riverina Highlands Cadet Brigade, and Ash Morrow (16–25 years) from North West Orange Brigade.

All of these young members were recognised for demonstrating maturity and an ability to work in a team while also displaying enthusiasm, initiative and commitment to the Service and their colleagues.

NSW RFS Commissioner Shane Fitzsimmons stated that “the effort and enthusiasm of young members in the RFS is significant and these awards acknowledge their hard work, camaraderie and community participation”.

Each year Rotary presents Emergency Services Awards, including recognition of young volunteers in the emergency services. Lachlan Sutherland

from the Gulgong Brigade, in Cudgegong District, received the inaugural Dorothy Hennessy OAM Emergency Services Youth Scholarship Award at the Awards Ceremony in May. Lachlan joined his local Brigade as a junior member and has now moved into a staff role with State Mitigation. This scholarship will allow Lachlan to pursue opportunities which will assist in furthering his career within the NSW RFS.

Applications for the Young Leader Scholarship are now open <https://bit.ly/2yIx9Ld>

And information about Young Volunteer awards is available on MyRFS:

<https://www.myrfs.nsw.gov.au/InfoAbout/Membership/YouthParticipationintheNSWRFS.aspx> ■



Left: NSW RFS Commissioner Shane Fitzsimmons with, from left, Cadet of the Year Anthony Coan, NSW RFS Young Volunteers of the Year Jack McQuellin and Ash Morrow. **Above:** Lachlan Sutherland, from the Gulgong Brigade in the Cudgegong District. **Below:** Commanding Officer of STS *Young Endeavour* Lieutenant Commander Mike Gough presents Hannah Redman the 2018 NSW RFS Young Leader Scholarship award.

recognised

The NSW Rural Fire Service has a wealth of young members volunteering and building up their qualifications and experience.





ST FLORIAN'S DAY BRAVERY & SERVICE AWARDS 2018

Each St Florian's Day, the NSW RFS holds its annual internal bravery and service awards. Drawn from across the Service, recipients are presented with awards in recognition of outstanding bravery or service.

Despite the Commissioner's jokes about May the 4th being Star Wars "may the force be with you" day as well as St Florian's day, the importance of the occasion cannot be missed.

As Fiona Peacock, one of the recipients from the Cassilis Brigade said, "we had no idea how important this was until we got here.

All here know that St Florian's day is an important day for the NSW RFS – from the uniformed staff and members to the families proudly smiling at their loved ones.

Both the Minister for Emergency Services, Troy Grant, and Guy Zangari,

the Shadow Minister for Emergency Services, are here showing that it's a day for both sides of politics to demonstrate support for the crucial work of the NSW Rural Fire Service volunteers.

Troy Grant, fresh from completing the gruelling Kokoda Track, to raise money for charity, acknowledged that St Florian's Day awards are about the "service above self" that RFS members embody. He wants to offer support, he said, to show that despite recent criticism by some who speak from the privileged position of hindsight the government knows that

"today is about humble groups of people being recognised for their 'extra service above self'".

During the ceremony, the Commissioner made everyone feel comfortable, stating to family members that while there are many uniforms and professional photographers in attendance, family is central to this ceremony so they shouldn't be afraid to come down the front to take a photo of your loved one getting an award.

There's an extraordinary range and diversity of recipients, from people who've attended the most gravely ill in times of duress to administrative units such as Procurement who've

helped the Service become more efficient.

The Commissioner reinforced that it is very important to take small moments of time out to say thanks given that the rest of the time members are tirelessly giving their efforts behind the scenes. And he thanks families, knowing that without family support, volunteering could not be sustained at brigade level. He acknowledges that for the families of RFS members there are many empty seats at tables at Christmas and summer holiday time. Receiving a St Florian's Award is special. ■



May 4 is St Florian's Day, named after the patron saint of firefighters. It is also known as International Firefighters Day.



2018 RECIPIENTS

Commissioner's Commendation for Service (Individual)

Group Captain Brian Ayliffe AFSM
Cobargo Brigade, Far South Coast, Region South

Deputy Captain Bruce Davies
Jerrabomberra Creek, Lake George Zone, Region South

Captain Stephen Garbutt
Wyrallah Brigade, Northern Rivers Zone, Region North

Firefighter Samuel Hatch
Tamworth Support Brigade, Tamworth District, Region North

Captain Neil Percival (Chaplain)
Broughton Vale/Berry Brigade, Shoalhaven, Region South

Firefighter Shirley Snowden
Tinonee Brigade, Mid Coast Team, Region East

Senior Deputy Captain Samuel Tout
Murringo Brigade, South West Slopes Zone, Region West

Firefighter John Tucker
Tamworth Support Brigade, Tamworth District, Region North

Commissioner's Certificate of Commendation (Individual)

Inspector William Britt
Bland Temora Zone, Region West

Mr Lindsey Flynn
NSW RFS Headquarters

Mr Aaron Howard
NSW RFS Headquarters

Mr Scott Hoy
NSW RFS Headquarters

Firefighter Rowena McGregor
Hydes Creek Brigade, Mid North Coast Team, Region North

Firefighter John Sandland
Tabourie Brigade, Shoalhaven, Region South

Commissioner's Certificate of Commendation (UNIT)

Castlereagh Zone Rural Fire Brigades and Cassilis Brigade
Castlereagh Zone & Liverpool Range Zone, Region North

Cudgong Airbase Crew Aviation Support
Cudgong District, Region West

Down the Wire Technicians

Lake George Zone Rural Fire Brigades and Group Officers

Mudgee 1A
Cudgong District, Region West

Northern Rivers Zone Group Officers and Brigades
Northern Rivers Zone, Region North

Pacific Palms Rural Fire Brigade
Mid Coast Zone, Region East

Picton Rural Fire Brigade
Southern Highlands Team, Region East

Procurement Accreditation Team
NSW RFS Headquarters

RFS Workers Compensation Working Group
Rural Fire Service Association and NSW Rural Fire Service

Stoney Creek Brigade
Lake George Zone, Region South

Commissioner's Unit Citation for Service

Northern Rivers Aviation Support Brigade
Northern Rivers Zone, Region North



"Today is about humble groups of people being recognised for their 'extra service above self'."

Left: The recipients of 2018 St Florians Day bravery and service awards pose with the Minister for Emergency Services, Troy Grant, and Commissioner Shane Fitzsimmons on the front steps of NSW RFS Headquarters.

Above right: The Cudgong Airbase and Aviation Support crew with their award and Commissioner Fitzsimmons.

Donations fund hot fire training equipment

Funds donated to brigades under the NSW Rural Fire Service and Brigades Donations Fund (the DGR) have contributed equipment and infrastructure to support hot fire training.

Last year, using the funds donated to the NSW RFS, the DGR facilitated three Hot Fire Training Centres—Lower Hunter, Bland Temora and Canobolas—and two mobile 40 foot container cells. Hot fire training cells are used for the advanced structural fire fighting course. The prior year thermal imaging cameras (TIC) were purchased, one for each district.

To complement these training tools, the Trustees determined to fund five thermal mannequins, one for each DGR funded Hot Fire Training Centre.

Thermal mannequins contain a heat source internally, replicating what may be encountered while using a thermal imaging camera. The picture below right is what you would see through the TIC, regardless of smoke density or available light. ■

Brigades that want to receive tax deductible gifts/donations either have to be individually endorsed by the ATO as a deductible gift recipient or participate in the NSW RFS and Brigades Donations Fund.

There are two parts to the fund, one for donations made to member brigades and the other for donations made directly to NSW RFS. There is a DGR committee which has oversight of the fund administration.

Details are explained in SS 2.1.14, should you wish further detail, and an article was published in the Bush Fire Bulletin vol.38 no.2/2016.





Vale Father Peter McGrath 1940-2018

Father Peter McGrath was remembered at a service at St Anthony in the Fields Catholic Church at Terrey Hills on 8 March. NSW RFS Commissioner Shane Fitzsimmons spoke a few words, reflecting on the significant role that Father Peter had played in the NSW RFS, but also to him and his family personally.

For more than 45 years, Father Peter was one of the Service's chaplains. Senior Chaplain Ian Spall writes: "Father Peter McGrath was a NSW RFS Chaplain before records were kept. He was part of the RFS since the 1970s. He was quite the character within his ministry, flamboyant, creative, relational, caring, boisterous. These are some of the words that go best to describe him. Maybe out of the box in style, but he was always loving. He could also be described as open, honest and often vulnerable."

Commissioner Fitzsimmons said Father Peter was recognised for his extraordinary generosity and care, his unique style and approach, his openness, sense of humour and candour, and most importantly, his unwavering commitment to serving others and seeking to make a real and meaningful difference.

Commissioner Fitzsimmons AFSM, along with Superintendent Craig Geddes and Senior Chaplain Ian Spall, presented Father Peter's family and colleagues with NSW RFS medals and a service flag in recognition of his extraordinary service and dedication to the Service. RFS members formed a guard of honour at the memorial service.

Father Peter was the popular parish priest at St Anthony in the Fields for 18 years. He married and performed services for many members.

His influence spread widely; he taught at North Sydney Teacher's College and the University of Technology, Sydney, and for five years Fr McGrath was a ratings winner on radio station 2SM where he was a regular commentator on social issues.

Father Peter McGrath was the founder of the Passionist Family Group Movement which encouraged faith in action in local community.

At his memorial service, a letter of gratitude and condolence was read from the men in the high security prison in Dallas to whom he had ministered and who asked him to set up a "Family Group" for them some years ago. "Though some have been there for 48 years, they thanked Peter for giving them a reason to live and a faith that brought hope."

Father Peter McGrath was awarded an Order of Australia Medal in 2011 for service to the community.

Father Peter will be missed by many in the community and certainly by many in the NSW Rural Fire Service. ■



"Though some have been there for 48 years, they thanked Peter for giving them a reason to live and a faith that brought hope."

OUR BULLETIN HISTORY

Bush Fire Bulletin

15



(Photo by courtesy of "Men of the Land" Society.)

BOY SCOUTS DISPLAY FIRE WARNING SIGNS.

The Boy Scouts pictured above at the Australian Boy Scouts Jamboree held at Lansdowne, near Sydney, from 29th December, 1960, until 9th January, 1961, made good use of fire warning signs issued by the Bush Fire Committee.

These signs served to remind those attending the Jamboree from all parts of the Commonwealth and overseas countries, as well as visitors,

of the need to take care with fire. Fire prevention is an integral part of the training of all Boy Scouts and emphasis is placed on the danger of allowing bush fires to originate from uncontrolled camp fires.

Maximum precautions were taken with the assistance of the Board of Fire Commissioners of New South Wales, to guard against the outbreak of fire at the Jamboree.

BUSH FIREbulletin

onTrove



The NSW RFS has joined forces with the National Library of Australia to digitise the entire collection of the Bush Fire Bulletin dating back to September 1952.

All editions of the Bush Fire Bulletin are available online and are fully searchable, making this huge historical archive easily accessible.

Commissioner Shane Fitzsimmons has praised the chance to make the Bush Fire Bulletin so accessible.

"The skill and dedication of our volunteer service has been recorded in the pages of the Bush Fire Bulletin, informing and bringing to life the important work our members undertake," Commissioner Fitzsimmons said. "I am very proud that this history of the NSW RFS will be available for all of Australia and the world to see."

Search place names, brigade names, dates and fire-related topics such as 'fire trails'.

How to search Bush Fire Bulletin On Trove

1. Type in your search term
2. Click 'Go'

You will be taken to the Bush Fire Bulletin's archive on the National Library of Australia's Trove website

3. A range of articles will be offered for selection
4. Click on the green View Online box on right to

view the article

You can print, download or simply read online.

To initiate another search return to the search box on the Bush Fire Bulletin page on the NSW RFS website.

Or leave the search terms ("nla.obj-284283986" OR "nla.obj-284265362") in the search box to stay within the Bush Fire Bulletin archive.



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Cover photo This is the view Ingleside RFB crew saw from the cab of their tanker as they responded to the Moorebank Avenue fire, April 2018. Photo by RFS member Joshua Grainger