

BUSH FIREbulletin

THE JOURNAL OF THE NSW RURAL FIRE SERVICE

Pilliga flares up



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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



The latter half of the 2014/15 fire season was a welcome reprieve. There had been early predictions of El Niño strengthening that typically brings challenging fire weather but in the end, NSW experienced relatively mild conditions. Nevertheless from the early start to the season in August 2014, through to the end of March 2015, NSW firefighters responded to more than 9,200 bush, grass and scrub fires which burnt 168,687 hectares across NSW. Due to ongoing dry conditions, 13 districts did extend their Bush Fire Danger Period through to the end of April.

Notwithstanding the early start to the season, particularly on the north coast, the season within NSW was not as busy as expected. Interstate deployments throughout Australia dominated the season from January through to April with the Service coordinating multi-agency responses. More on this can be seen in this Bulletin [italics] on pages 8-15. NSW RFS volunteers were deployed to Victoria, South Australia and for the first time, to Western Australia. Crews were even sent to Elcho Island in Northern Territory to assist after Cyclone Marcia destroyed parts of that area.

Aviation support was provided by the Service to the Victorian Large Air Tanker Program. Our staff and volunteers gained valuable experience working with these large aircraft. A trial of this kind of aircraft is being considered for NSW in the 2015/16 season and more information about that is in this issue of the *Bulletin*.

The worst storms in a decade were seen in NSW in April with heavy storms and flooding across the Sydney and Hunter Region. It was one of the busiest times in the history of the NSW State Emergency Service and our members were very active in supporting them in the big task. Congratulations must go to the staff and volunteers of the SES who recently celebrated 60 years of service to the community. The NSW SES and NSW RFS have always stood shoulder to shoulder in times of disaster. The old adage is certainly true when it comes to the relationship between the NSW RFS and NSW SES – a friend in need, is a friend indeed.

Along with trucks and hoses, one of the most ubiquitous elements of NSW RFS is the yellow Personal Protective Clothing (PPC) that each firefighter dons on a regular basis. NSW RFS PPC is world class and this year a full review of the garments is being undertaken to keep it up-to-date and appropriate for all our members.

The PPC review includes extensive trialling and testing within brigades. An explanation of the review and advice on how to get involved is included in this issue of the *Bulletin*.

Throughout the season NSW RFS volunteers and our emergency service colleagues have spent time away from their loved ones, their jobs and their communities so they can help others. For this they deserve our sincere thanks and gratitude.

Regards,

Shane Fitzsimmons
NSW RFS Commissioner



@RFSCommissioner



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Donations provide practical help to firefighters



Donations made to the NSW RFS are handled by the independent body known as NSW Rural Fire Service & Brigades Donations Fund. In 2014 the Fund allocated \$638,036 of donations to purchase and supply Thermal Imaging Cameras and Buoy Wall Dams to the Service. Forty-eight Thermal Imaging Cameras have been delivered - one camera to each district. Over 40 Buoy Wall Dams, of various capacities ranging from 4,500 litres to 18,000 litres, were also supplied to the Service. These are used to hold bulk water in remote areas or at airbases. Two districts were provided with new trailer mounted variable messaging signs. Glenn Wall, Chair of the Fund and NSW RFS volunteer, said "On behalf of the Trustees, Member Brigades and the NSW RFS, I sincerely express our gratitude to all those who donated so generously to support the endeavours and activities of our volunteer rural fire brigades." ABOVE: Group Captain Andrew Macdonald (Donations Fund Trustee) presenting a Thermal Imaging Camera to Superintendent Richard Petch of Cumberland Zone.

Cadet of the year



Timothy Pedley from Colo High School has been named 2014 Cadet of the Year. He was presented with his award by the Minister for Emergency Services David Elliott and NSW RFS Commissioner Shane Fitzsimmons at NSW Parliament House on 10 May (above). Timothy's enthusiastic participation in all aspects of the course, including helping to organise crews and equipment as well as extra training sessions made him stand out. He was described as the 'backbone of the Colo High School RFS Cadet Program' and enjoyed a dramatic increase in his self-confidence over the 10 week program. He has even joined his local brigade as a junior member!

St Florian's Day Awards



Twenty one individual and 17 unit awards were bestowed upon NSW RFS members in recognition of their bravery and outstanding service on St Florian's Day on 4 May 2015. Remarkable acts of bravery, courage, service and commitment were recognised by these awards including the 2013 Blue Mountains bush fires, a fuel tanker which caught alight at Mona Vale, and a hotel fire at Cobar. Awards were also presented to members of the NSW RFS and NSW National Parks and Wildlife Service Remote Area Firefighting Teams and for members who undertook large scale events to help their communities be better prepared for fire. The recipients are seen here with Minister for Emergency Services David Elliott and NSW RFS Commissioner Shane Fitzsimmons. Photo by Adam Hollingworth

It takes teamwork



The NSW RFS assisted the NSW SES throughout dramatic storms across the Hunter, Central Coast and Sydney regions in mid-April 2015. It was described as the worst storm in a decade with 12 areas across NSW declared natural disasters. Between Tuesday 21 April and Friday 24 April NSW RFS crews attended more than 3,500 storm and flood-related incidents, working to rescue stranded residents, clearing trees, pumping flood water out of car parks and even helping to direct traffic. In all, the NSW SES received nearly 25,000 calls for assistance. The worst hit area was Dungong in the Hunter region, where some homes were swept off their footings and three residents died. NSW RFS Strike Teams from Mid North Coast, Shoalhaven, Lake George, Illawarra, Blue Mountains, Lower North Coast, Sutherland, Macarthur and Lithgow were deployed to storm-damaged areas in Wyong, Lake Macquarie and Cooranbong. The NSW RFS aviation resources also delivered supplies to Gillieston Heights, in the Hunter Valley, which was isolated by floodwater and down-the-wire trained volunteers were deployed. Photo by Sharon Quandt

Far West News24 stars



After a deal of success utilising social media, in early March 2015 the Far West Team launched an initiative called Far West News 24 (FWN24). Using a community engagement grant they purchased broadcasting equipment and set up a mini-studio at the Cobar Fire Control Centre (above) to create podcasts and vodcasts for remote rural communities, remote area pastoralists as well as a number of discrete Aboriginal communities in the region. Stay in touch with Far West News 24 on the Far West Team Facebook page.

Thank you so mush!



NSW RFS Commissioner Shane Fitzsimmons has recently received a Certificate of Appreciation from two communities in south west Western Australia. Children in the schools of Boddington and Quindanning were keen to thank all NSW RFS members who were part of the deployment to WA in February this year. The Certificate of Appreciation appears here and includes the following words: "The communities of Boddington and Quindanning would like to thank you for your involvement in the recent Lower Hotham fire. The assistance your organisation have given to our community in its time of need is much appreciated and will not be forgotten, thankyou." One child wrote on her note: Thank you so mush!

A welcome reprieve

An aerial photograph of a vast forest landscape under a blue sky with scattered white clouds. In the foreground, a dense green forest is visible. In the middle ground, a line of fire is visible, with a bright red retardant line being dropped from an aircraft, creating a sharp contrast against the green trees. The background shows rolling hills and mountains under a clear sky.

November 2014: Retardant being used to contain the Round Waterhole Fire. Photo by Dennis Saunders

From an early start to the season in August 2014, through to the end of March 2015, NSW firefighters responded to more than 9,200 bush, grass and scrub fires which burnt 168,687 hectares across NSW.

A total of 13 districts extended the Bush Fire Danger Period (BFDP) until the end of April due to continuing dry and fire-prone conditions.

Some of the more challenging incidents included the destructive McGills Rd and Florida Rd fires on the Mid North Coast and Lower North Coast and the Cliff Drive fire at Katoomba, as well as large fires at Peak Hill near Parkes, Warrimoo in the Blue Mountains and, as late as March, three fires in the Pilliga East State Forest.

Commissioner Shane Fitzsimmons said while relatively mild conditions prevailed across the state during summer, there had been several early indications that the season would be a challenging one with above average fire activity.

Fifty-five of 152 Local Government Areas commenced the BFDP up to two months before the season's official start on 1 October 2014, due to prevailing hot and dry local conditions.

During August and September 2014, there were 1,417 bush and grass fires, including an eight day period in the Clarence Valley and Kempsey LGAs where 114 bush and grass

fires burnt 9,500 hectares, destroying five homes and damaging a further eight.

"As late as November 2014, the Bureau of Meteorology was advising that higher than average temperatures would prevail statewide, with an above average likelihood of El Niño further intensifying conditions," Commissioner Fitzsimmons said.

"Fortunately, the conditions that did eventuate were less severe than those forecast, providing our members with a welcome reprieve from fighting destructive bush fires during Christmas and the subsequent summer period."

As well as responding to incidents across NSW, the NSW RFS coordinated a number of interstate deployments to provide assistance to colleagues

battling devastating blazes in South Australia, Victoria and Western Australia.

"More than 830 firefighters worked alongside their interstate colleagues as part of a coordinated firefighting effort including NSW RFS members, NSW National Parks and Wildlife Services, Fire and Rescue NSW, Forestry Corporation NSW and Ambulance Service of NSW, ACT Parks, ACT RFS and ACT Ambulance Service," Commissioner Fitzsimmons said.

In February, NSW RFS crews helped NSW Far North Coast residents prepare for deteriorating conditions linked to Cyclone Marcia and in March, 15 NSW RFS members were sent to Elcho Island in the Northern Territory to construct temporary shelters

for residents left homeless after Cyclone Lam.

2014/15 BFDP facts and figures (August 2014-March 2015)

- Total number of bush, grass and scrub fires – 9,200
- Total hectares burnt - 168,687
- Six homes destroyed, nine homes damaged
- The statutory 2014/15 BFDP began on 1 October 2014 and ended 31 March 2015
- Fifty-five LGAs commenced the BFDP two months early due to hot and dry conditions
- Twelve LGAs ended the BFDP up to one month early due to mild conditions
- Thirteen LGAs extended the BFDP until 30 April 2015 due to ongoing dry conditions



ABOVE LEFT: 3 January 2015: Lunds Plantation Fire in Bago State Forest near Tumut. Photo by Andrew Roberts. ABOVE RIGHT: March 2015: A fire near Lake Menindee fire in mallee country. Photo by Bill Britt

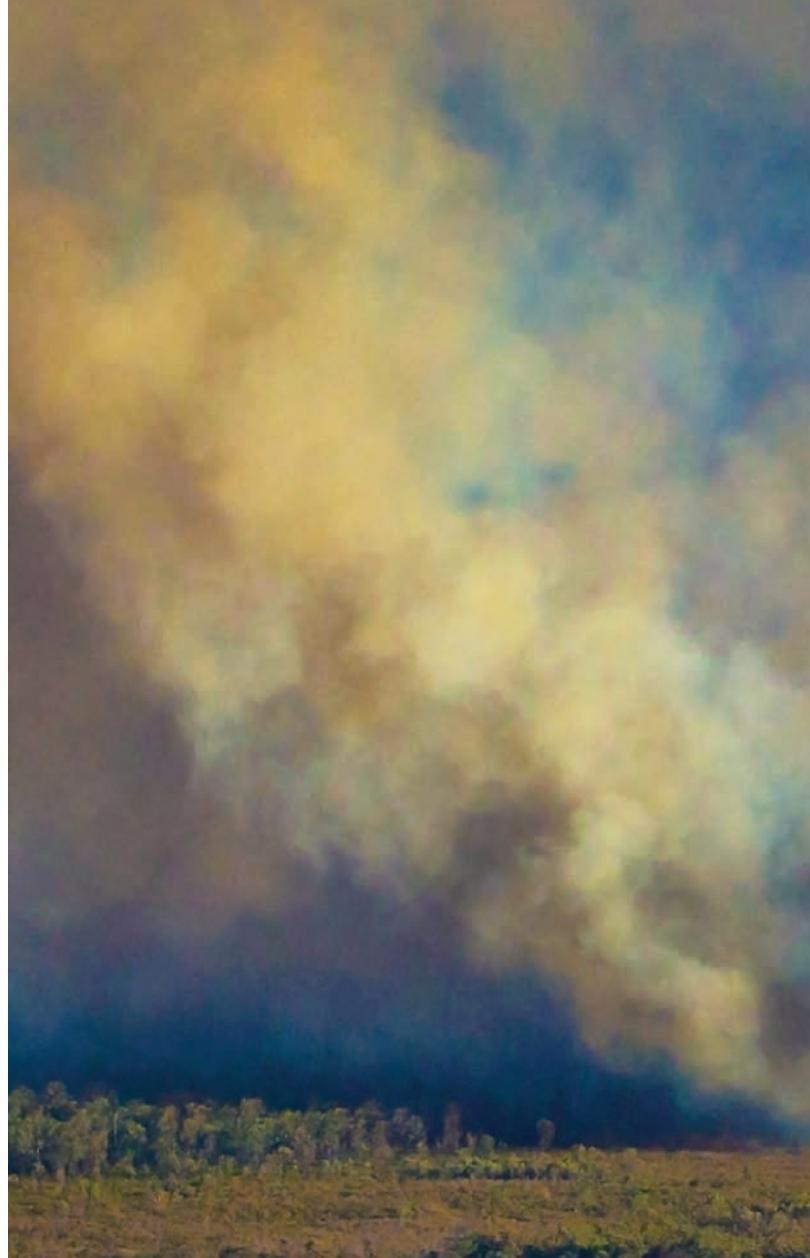
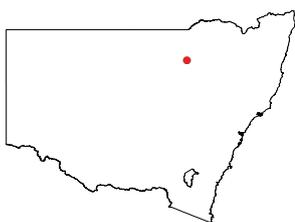
INTERSTATE DEPLOYMENTS 2014/15

	Victoria December 2014 & January 2015	South Australia January 2015	Western Australia February 2015
NSW Rural Fire Service	174	463	90
Fire and Rescue NSW	2	2	3
National Parks and Wildlife Service	2	7	27
Forestry Corporation	0	0	7
Ambulance Service of NSW	0	7	8
ACT RFS, Parks and Ambulance	0	0	19
NT Fire Services	0	0	2
Total	178	479	156

Pilliga Forest flares



A pall of smoke blanketed large areas of the Narrabri district in early to mid March 2015 due to three fires in the Pilliga East State Forest. The bush fires produced thick volumes of smoke, ash falling many kilometres away and spectacular sunsets for photographers. A total of approximately 35,000ha of forest was burned but there was no damage to property.



Wednesday 4 March 2015

About 40km south west of Narrabri three fires were burning in remote bushland. The Brigalow Road, Emu Road and Dangar Road fires were burning within the Pilliga State Forest and had likely been sparked by lightning strikes.

The three fires were about 20km apart and there was no threat to property. The largest of the three fires, Emu Road fire, was approximately 40 hectares in size and burning in an easterly direction. The three fires were about 20km.

The NSW RFS, National Parks and Wildlife Service and Forestry Corporation of NSW were working side by side to battle the blazes.

The Brigalow Road fire was burning in the vicinity of a few remote rural properties, however there was no threat to these properties. NSW RFS crews and a fixed wing waterbombers were on

scene and the National Parks and Wildlife Service was using heavy plant to build containment lines. Forestry Corporation firefighters, aided by a fixed wing waterbomber and heavy plant were working on the Emu Road fire. NSW RFS and a fixed wing waterbomber were working on the Dangar Road fire.

Thursday 5 March

The three fires were spreading slowly toward the north and continued to create a large amount of smoke west of the Newell Highway and south west of Narrabri. Crews were controlling the fire.

Friday 6 March

At 1000hrs a Section 44 Declaration for the area. Extensive back burning was required to get the fires under control and more aircraft and crews were required. Crews were also needed for the all important blacking out



Photo by Josh J Smith

operations throughout the current fireground.

Saturday 7 – Monday 9 March

The Emu Road fire and the Dangar Road fires were continuing to produce large amounts of smoke. Extensive backburning operations were conducted overnight utilising the already existing fire trails throughout the forest. Ground crews were supported by aircraft and heavy plant.

The Emu Road and Brigalow Road fires were both considered contained on Saturday 7 March and firefighters continued to patrol the fireground.

Out-of-area crews from Clarence Valley, Northern Rivers, Orana and Cudgong were brought in to give local crews a rest.

In this period extensive backburning operations were conducted with more than 30kms a day being treated.

Two NSW RFS Strike teams were at work during the day and combined crews of local NSW RFS, Forestry Corporation and National Parks and Wildlife Service throughout the night.

Tuesday 10 March 2015

Firefighters remained on the ground patrolling the containment lines under favourable east to south-east winds. An aerial incendiary

operation successfully burned out leftover forest within the fireground. At that stage the perimeter of the fire was 152km and around 3,000ha of unburnt country remained inside the perimeter.

Wednesday 11 March 2015

A huge effort by firefighters saw all three fires considered largely contained within seven days of ignition. The Dangar Road fire had burned 25,790ha,

Emu Road fire 1,297ha burnt and Brigalow Road fire 212ha burnt.

About 100 NSW RFS personnel had been engaged in fighting the fires with the support of 40 to 50 appliances, a total of six aircraft and heavy plant machinery.

Firefighters continued to patrol firegrounds until 23 March 2015 by which time all three fires had been declared out.

WHAT IS THE PILLIGA?

Australia's largest inland native forest, the Pilliga Forest spans more than a half a million hectares. It is one of the iconic landscapes of inland Australia and consists of semi-arid woodland with cypress pines and ironbark.

The Pilliga once supported a large forestry industry but much of the forest was

set aside for environmental conservation in 2005.

The Pilliga is traditional Country of the Gamilaroi people.

The Pilliga Forest is a mixture of eastern and western climates, making it very attractive to birds with more than 230 species recorded. It also has the largest koala population in NSW to the west of the Great Dividing Range.

Significant fires have occurred in the Pilliga Forest in 1997, 2002, 2006 and 2013. The major fire in 1997 burned close to 143,500ha of the forest. An extremely dry winter and spring in 2006 saw a number of large fires develop, including the Pilliga 4 Fire in November/December which burned out 74,000ha on just its first day.

Lending a hand in Victoria and South Australia

In December 2014 and January 2015 more than 600 NSW RFS volunteers and staff travelled to Victoria and South Australia to provide assistance during major bush fire emergencies in those states.

Fire activity was quiet in NSW but between 16-18 December 2014 and 3-6 January 2015 174 members were deployed to Victoria to assist with bringing bush fires under control. From 3-9 January a further 414 firefighters and 49 specialists assisted in the damaging South Australian fires. Significant resources accompanied the firefighters including linescan aircraft, waterbombing aircraft, liaison officers, incident management teams and fire trucks.

"As you would no doubt be aware our colleagues in Victoria and South Australia have been experiencing significant fire weather and fire behaviour over recent days," Commissioner Shane Fitzsimmons told NSW RFS members on 3 January 2015. "Following discussions with our interstate colleagues, our State Operations team have been coordinating deployments to both Victoria and South Australia in response to their respective requests."

On 3 January 2015 more than 100 members flew to South Australia and that afternoon further resources were despatched including 200 personnel, 32 fire trucks, an Aircrane and two surveillance aircraft.

Ambulance Service of NSW personnel joined the NSW RFS strike teams in South Australia.

Crew rotations of personnel were immediately triggered and additional support was identified should it be required. More than 100 NSW RFS members and two Ambulance Service of NSW personnel headed down to South Australia on 6 January to replace the crews who have already spent three days battling fires in that state.

In South Australia the NSW RFS crews assisted at the Sampson Flat fire in the Adelaide Hills. It was the worst affected area with 27 homes destroyed and 12,500ha of land razed. NSW RFS crews were involved in front-line firefighting,

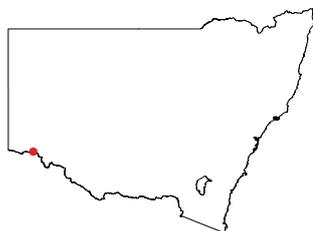
property protection, backburning and mopping up after the fire. The Sampson Flat fire was contained on 8 January after storms brought rain to the area.

NSW RFS members began leaving South Australia on 9 January after good rains. Ten days later a further five NSW RFS members flew to South Australia to conduct the second phase of Bush Fire Impact Analysis (BIA). The BIA teams assessed the homes and structures destroyed, recorded what the building was made from, its proximity to vegetation, the direction the fire impacted the property and many other factors. This information feeds into research to help shape future policy on building in bush fire prone areas.



2 January 2015: The Sampson Flat Fire as seen from Gomersal Road, Tanunda at about 9pm. The fire is about 29 km away. Photo by Peter Robinson, The Leader Newspaper, Barossa Valley.

A gift from above for Dareton firefighters



On their way home from assisting in South Australia, two NSW RFS helicopters stopped by to help out at a small fire near Mildura in Victoria. Superintendent Steve Walker from Lower Western District gives an account of the 'gift from above' that helped contain the fire.

7 January 2015

A Triple Zero (000) call reporting a bush fire was received at around 2000hrs on the 7 January.

I was the Lower Western Duty Officer at the time and could see the smoke from my place some 10kms away. The first brigade on scene was Dareton who requested support immediately. Buronga and Gol Gol Brigades were despatched along with the Bulk Water Tanker Wentworth 13.

The area where the fire was located was a Crown Land Reserve between the Murray River and three residences on River Road. Initially two houses were under threat with embers from several large and old River Red gums blowing toward the houses. Property protection was paramount as the fire was dangerously close. The only means of protection was direct attack as the embankment to the river flat was too steep.

Firefighters on the ground did an amazing job to keep the properties safe throughout the night. Crews and vehicles were rotated throughout the night when Tapio and Pomona Brigades arrived to assist.

8 January 2015

The following day, daylight provided us with a different picture. Many large River Red gums were alight on the interface. Access to water was also a concern, despite the mighty Murray River being so close.

Heavy plant was called in to clear trails on the river flat where some large trees had fallen across an access point to

the river and a grader was used to construct fresh containment lines. The massive height of the trees still standing and burning made extinguishment impossible - firefighters could not get close enough to put them out.

I contacted Region South Major Incident Coordinator (MIC) Inspector Angus Barnes and explained our concerns, thinking a cherry-picker or elevated platform might be helpful. It was then that Inspector Barnes informed me that an NSW RFS chopper was in the area arriving at Mildura to re-fuel on its return from assisting with fires in South Australia. I asked about the possibility of using the chopper for waterbombing the Dareton fire.

The request was granted by State Duty Officer and the pilot, commenced dropping water down the funnels of those majestic River Red gums, returning and refilling from the river. This work was carried out with pinpoint accuracy with every single drop – and I counted more than 50 drops. This went on for almost two hours non-stop.

Inspector Barnes contacted me asking if we could utilise a larger aircraft. I thought he was joking when he said an Aircrane was at Mildura Airport re-fuelling!

At around 1220hrs a siren sounded and the helicopters stopped working and moved south east of the fire site. Then came the roar as the Aircrane flew over the top of us. The Aircrane made two drops right along the interface to protect the houses.

The Aircrane departed with our thanks and the smaller

chopper continued to work, until all trees were treated. It too then departed with our thanks. We were lucky to have these aircraft passing through and the work they performed was a 'gift from above'. It was something in my 15 years of service I have not seen in this district.

Ground crews continued to strengthen the established containment lines and maintained a protective watch at each residence as the winds picked up, blowing embers again towards the homes.

At about 1600hrs the heavy plant was parked up and firefighters began to relax. At that point it had been a 20-hour effort.

At around 1630hrs, the rain started to fall.

I would like to thank Inspector Barnes for his assistance in liaising with the State Air Desk and those two pilots (who I owe a beer) and more importantly I want to thank my staff members and all the volunteers who worked tirelessly on this incident.



ABOVE: FB200 scooping up water from the Murray river to put out the blaze threatening property in Dareton. By Steve Walker



Large air tanker program in Victoria

By Simon Davis, Manager SMSS and LAT Air Base Manager



Emergency Management Victoria contracted two Large Air Tankers (LATs) for three months during the 2014/15 fire season and seven NSW RFS staff and volunteers were deployed to assist with the program.

This is only the second time that LATs have been used for firefighting in Australia and consideration is being given to pilot the use of a Very Large Air Tanker (VLAT) or Large Air Tanker (LAT) program in NSW for the 2015/16 fire season. In early February 2015 the Premier Mike Baird announced that Large Air Tankers would be employed in NSW in the 2015/16 fire season.

A Large Air Tanker is a multi-engine fixed-wing firebombing aircraft that can carry between 10,000 litres and 40,000 litres of water at a time. Very Large Airtankers are capable of delivering greater than 40,000 litres of water.

Their capacity to carry large quantities of water, foam, gel or retardant allows the delivery of variable coverage levels, drop lengths, widths and multiple drops. LATs are able to reach remote fires rapidly and quickly return to airbase to reload. Faster airspeed and larger fuel

tanks enables LATs and VLATs to deliver more suppressant in a shorter time frame than the aircraft currently in use in Australia to date.

The two Large Air tankers contracted by Victoria for use during the 2014/15 bush fire season were a Hercules C130Q and an Avro RJ85. The LATs in Victoria for the 2014/15 fire season were coordinated by a multi-agency project team and the Emergency Management Victoria State Air Desk (SAD) supported by a dedicated Air Attack Supervisor (AAS) and Air Base Manager (ABM). The LATs were deployed within Victoria as well as interstate. Throughout the 2014/15 fire season the LATs conducted missions in Victoria, South Australia, Western Australia and Tasmania.

NSW RFS involvement

Following a comprehensive training and briefing day, I was deployed to the LAT program and commenced my first shift on Saturday 3 January 2015. My deployment included work across two states to support firefighting efforts in South Australia and Victoria. Group Captain Andrew Beville

(Southern Highlands Team) was deployed with me as the AAS. Andrew and I were deployed for an initial set of shifts, however our deployment was extended as a result of significant fire activity and the requirement to maintain a LAT presence in South Australia.

Over the five days I oversaw 43 sorties and 41 drops equaling 522,900 litres of water and retardant on the firegrounds in Victoria and South Australia. Initially my role was to be Air Base Manager at Avalon airport in Victoria but at the commencement of my second shift, I was deployed with the LATs and the AAS platform to South Australia. I established the airbase at Edinburgh Air Force Base and we got to work on the Sampson Flat Fire. The support provided by the Air Force was remarkable, it ensured a smooth transition of operations from Victoria to South Australia.

The LATs can work effectively with other aircraft with good communication and supervision from the AAS. In terms of the role of Air Base Manager, the differences between managing and coordinating the current fleet of aircraft and the LAT

are fairly minimal and most processes are unchanged, the logistics requirements for the LATs are simply far greater.

Group Captain Beville and I both gained significant insight into working with LATs, interstate arrangements and process and gained a different outlook into aerial firefighting operations. This experience was invaluable and it will be applied during operations and in a learning environment as required.

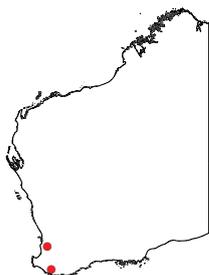
Throughout the season the NSW RFS deployed a further three Air Base Managers and three Air Attack Supervisors who all gained valuable experience in working with and around the LATs.

TOP: Hercules C130Q: deployed from Victoria during the 2014/15 fire season it has a tank capacity of 13,250 litres and cruising speed of 555kph it requires two pilots and a flight engineer to operate. ABOVE: Avro RJ85: deployed from Victoria during the 2014/15 fire season it has a tank capacity of 12,500 litres and cruising speed of 740kph it requires two pilots to operate.



Karri trees are unique to south west Western Australia and are one of the tallest species in the world, reaching heights of 90 metres. Hundreds of hectares of Karri forest were burned in the recent fires. NSW RFS crews 'walked the roads' identifying dangerous trees for treatment. Photo by Rolf Poole

Heading West



Government of Western Australia
Department of Fire & Emergency Services



DFES
Department of Fire & Emergency Services

In February 2015 for the first time NSW RFS crews were deployed to Western Australia to assist with two major fires burning in the south west of the state. Combined, these two fires had burnt in excess of 150,000ha. Western Australia's Department of Parks and Wildlife (DPaW) worked alongside the Department of Fire and Emergency Services (DFES) to manage both of these major fires. At the time these local authorities were dealing with crew fatigue while also expecting further fire outbreaks.

The fire which started in the O'Sullivan Forest Block in the Shannon National Park was known as the Northcliffe fire. It burnt a total of 99,000ha and the All Clear advice was issued on 20 February 2015. This was the biggest fire in the south west of Western Australia since the Dwellingup fires of 1961.

The other large fire where NSW RFS crews were able to assist was in the southern part of Lower Hotham in the Shires of Boddington, Collie and Williams and was known as the Boddington fire. The Boddington fire burnt

52,000ha. This fire was issued with an All Clear advice on 13 February 2015.

NSW RFS assistance

Assistance from the NSW RFS was requested by DFES via Emergency Management Australia. It was the first time a request was made from WA for a major deployment from NSW RFS. The Service stepped forward to coordinate an additional multi-agency and multi-state deployment of firefighters and specialists including aviation and Incident Management Teams (IMT), as well as managing deployments from ACT and Northern Territory. The deployment of 156 people comprised personnel from NSW RFS, Ambulance Service of NSW (Special Operations Team), Fire and Rescue NSW, Forestry Corporation of NSW, NSW National Parks and Wildlife Service, ACT RFS, ACT Parks, ACT Ambulance Service and Northern Territory Fire Services. The Airplane *Gypsy Lady* was also provided to assist firefighters.

Gypsy Lady was dispatched by the NSW RFS State Air

Desk on 5 February 2015. The Airplane set off from the east coast taking fuel stops every two hours as it made its way across the spectacular southern coast of Australia, including the Nullarbor Plain, to reach the Indian Ocean coast. Travelling at an average of 115 knots it took 19 flight hours but with logistics of re-fuelling the Airplane took 49 hours to reach Perth. *Gypsy Lady* was put to work immediately on the Boddington fire. Two NSW RFS volunteer aviation personnel went on to assist with operations and air base management at the Boddington fire along with the *Gypsy Lady*.

On the same day that *Gypsy Lady* was dispatched, 5 February, the WA Department of Fire and Emergency Services requested further assistance of firefighters and Incident Management specialists from NSW via Emergency Management Australia. Bad fire weather, including temperatures in the high 30s along with strong and gusty winds was predicted for the coming weekend.

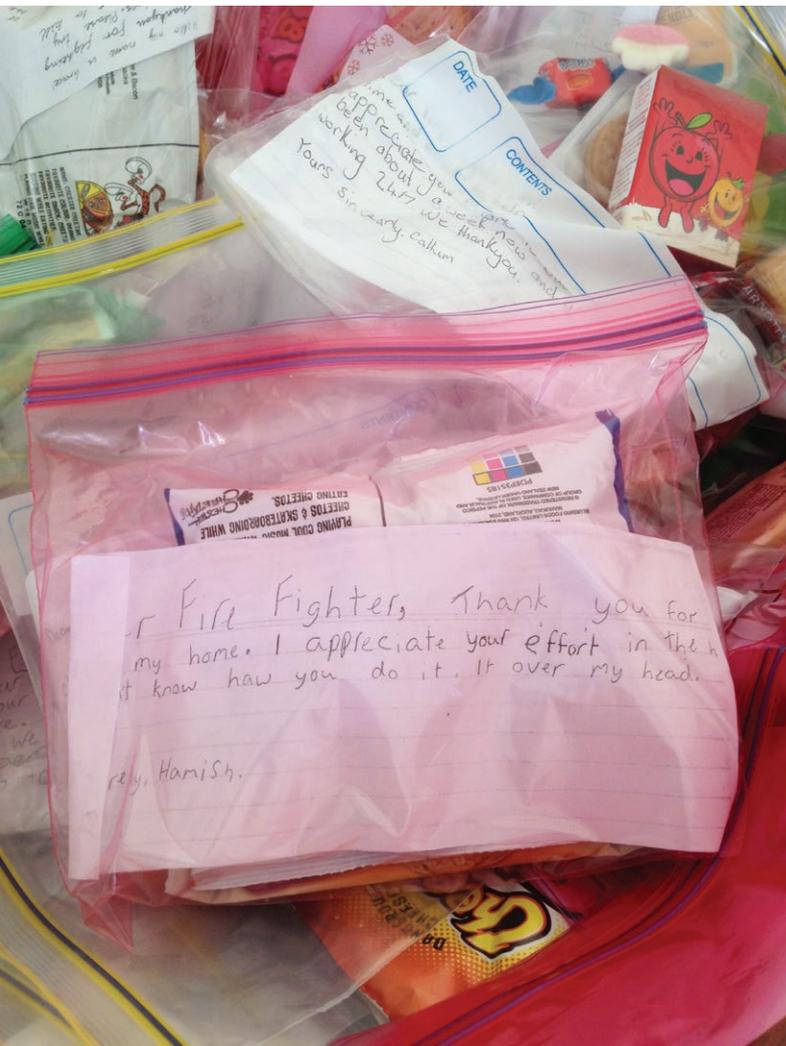
Liaison officers from the NSW RFS were deployed to Perth on the

6 February to work with local authorities to prepare for the arrival of crews and specialists over the coming days.

At 0900hrs on Saturday 7 February 2015 a specially chartered Qantas 737 departed Sydney with over 150 personnel on board bound for WA.

On arrival in Perth, crews were provided with an overview of the current fire situation in the state including general summer weather patterns in WA, forecast weather and a detailed safety briefing covering fatigue and the hazards posed by fire-weakened giant Karri trees. Further specific briefings covered the WA mop-up requirements in Karri forest, operation and use of the radio system as well as truck familiarisation.

Of note was the briefing that covered the map grid referencing system. All WA DPaW fire maps generally have the standard UTM grid and latitude/longitude tabs printed around the border. In addition a third alphanumeric grid system, known as the 'WA Forests Department Grid', is overlaid



CLOCKWISE FROM TOP LEFT: Lunch bag for firefighters included a special message of thanks from the local school children. Photo by Rolf Poole. TOP RIGHT: On arrival in Perth, NSW crews went to the Department of Parks and Wildlife office and were given a briefing of the current situation and potential for the next week. Photo by Paul Seager. BOTTOM RIGHT: WA firefighting agencies use the WA Forests Department Grid on all maps. This grid system uses a standard grid interval of one mile and was referred to in all local communications, briefings and in the Incident Action Plans. They also have trees identified with the grid reference marked on them! Photo by Ken Hepplewhite

on the maps. This grid system uses a standard grid interval of one mile and was referred to in all local communications, briefings and in the Incident Action Plans.

By the time NSW crews had arrived one of the main concerns was falling trees within the thousands of hectares of burnt Karri forest. Crews were tasked with patrolling the Northcliffe fireground, checking containment lines and identifying dangerous trees that had to be brought down by specialist chainsaw crews or by machinery.

A specialist aviation crew was assigned to the Northcliffe fire to help build retardant lines using waterbombing aircraft.

After a week of the deployment, the majority of crews touched down in

Sydney or Canberra on Friday February 13. In Sydney crews were greeted at the gate by Commissioner Shane Fitzsimmons and other NSW RFS staff.

The Northcliffe fire

By Group Officer Andrew Macdonald, Macarthur Zone

The crews tasked to the larger Northcliffe fire arrived at the Manjimup base camp, known as 'tent city', by mid afternoon on Sunday 8 February 2015. The Northcliffe fire was approximately 90,000ha in total and was burning in Karri forest with average fuel age of over 20 years and had burnt though to the coast at Windy Harbour. Night crews quickly prepared for deployment and were back on the bus for the one hour trip to the staging area at Northcliffe. Throughout the duration of the deployment

the standard 12 hour day/night 6 to 6 shifts were in use. Fireground tasks initially included backburning, mop-up and patrol. We also had to keep a lookout for 'hop overs'. These are better known in the eastern states as a spot over or slop over.

Once the fire had been contained the day crews began the task of 'walking the roads'. This involved crews walking parallel to the road to inspect all trees in the danger zone. The depth of checking is 1.5 times the canopy height, which in Karri forest is a depth of over 100m either side of the road. Trees identified as 'dangerous' were marked with coloured tape depending on their particular condition. If the tree needed to be felled or pushed by a bulldozer a secondary assessment was made by a Department of Parks

and Wildlife staff member prior to this occurring.

The Manjimup 'tent city' consisted of floorless khaki tents care of the Australian Defence Force for the dayshift crews. Nightshift crews slept in airconditioned 'site sheds' to help improve daytime sleeping conditions. Meals were cooked and prepared by volunteers from the children's cancer charity, Camp Quality. These volunteers always seemed to be cooking something and couldn't do enough for us to make our stay as comfortable as possible.

On the last night at Manjimup the local community turned out en masse to thank the NSW crews. Leading up to the evening a hat was passed around and after some words of thanks from community leaders, the NSW team

presented to Camp Quality a donation of more than \$1,700.

While there was little time for sightseeing, a number of crews managed a quick trip to one of the local fire spotting towers that is no longer in use but open to the public.

In the 1950s a set of eight fire lookouts were constructed in the Karri forests in southwest WA. These lookout huts were constructed on top of tall Karri trees and reached heights of up to 75m above the ground. Access to the huts is by climbing metal pegs drilled into the tree that form a ladder.

Friday morning saw the crews depart Manjimup at 4.30am for the long drive back to Perth airport and then return by air to Sydney. Just prior to departing Perth airport WA Department of Fire & Emergency Services (DFES) Commissioner, Wayne Gregson, thanked all the crews for their efforts.

The Boddington fire

By Inspector Ken Hepplewhite, Lower Hunter Zone

Recently the Lower Hunter team was asked to supply IMT (Incident Management Teams) and firefighters to assist with a deployment in Western Australia.

The initial request was for two drivers and two chainsaw operators for a seven day deployment. Soon enough a second request arrived to send IMT staff, Divisional Commanders and Sector Leaders.

A contingent of 10 from Lower Hunter was amongst the group of more than 150 members who headed off to Western Australia on Saturday 7 February 2015.

By the time we arrived the local crews had almost contained the major fires in southern WA, however most of the crews had been working heavily for the past couple of weeks and were in need of a rest.

On arrival in Perth, we went to the Department of Parks and Wildlife office and were given a briefing of the current situation and potential for the next week. The following morning we undertook an induction that included a number of important topics such as weather and local fireground Standard

Operating Procedures. We were given a brief on the local types of vegetation and hazards associated with these vegetation types.

We also looked over the types of vehicles we would be using on the fireground which comprised of:

Slip on units: generally their version of our Cat 9 and predominantly these were Sector Leader vehicles and were mainly dual cab Hilux's with a slip on tank / pump system.

Gang Trucks: these were an equivalent of our Cat 2 on a dual cab Isuzu.

Heavy Tanker: these were an equivalent to our Cat 1s but were only a single cab Isuzu.

Once our induction had been completed we were split into different groups and sent to different locations, one crew went to Northcliffe in the far south of the state and one crew went to Boddington and the last crew went to Collie. Most of the crew from the Lower Hunter Zone were assigned to the Boddington fire and went to Collie as part of a 32-person team.

Due to the fire conditions in WA, our crews primarily assisted with road clearance and mop up and patrol work and allowed the local crews to have a couple of days off to rest. Our deployment only lasted seven days and the second rotation of our shift wasn't required.

During our time in WA the fire crews were issued with snack packs to take to the fireground. In these snack packs the local school kids had written letters of thanks to the visiting firefighters. This action touched a lot of the crews in such a way that on our stand down day we arranged to do a school visit to thank the school kids in person. We visited Mount Wilson primary school at Collie and the children were excited that we had made time to visit their school and thank them personally.

All the crews enjoyed the opportunity to assist WA crews. This was the first deployment from NSW to assist WA and was a good learning experience to see how things are done as a comparison to here at home.

Indian Pacific

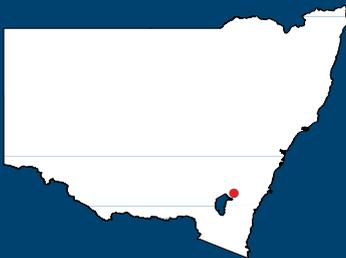
Part of the NSW assistance to Western Australia bush fire in February 2015, was the deployment of the Aircrane.

Not built for such long distances, the helicopter had to refuel every two hours and was accompanied by a fuel truck at all times. Re-fuelling many times on the spectacular Nullarbor Plain and along the length of the Australian Continent, it took two days to make its way to the firegrounds in Western Australia. Photos courtesy of Kestrel Aviation





Leadership on the fireground



Leadership on the fireground is key to the success of any fire campaign, but in many districts there is a dearth of qualified and experienced Crew Leader Supervisors. Over the past two years the Lake George Zone has addressed this challenge with their Crew Leader Mentoring Group. Stoney Creek Deputy Captain David Hanzl, explains how the Crew Leader Mentoring Group came about and reveals why it is working so well.

We have a challenge

Lake George Zone like many NSW RFS districts, has a challenge. We need more Crew Leader Supervisors (CLS) to meet the requirements of all brigades. What's so bad about that? We still manage to roll responses to incidents don't we? Well, yes, but...

CLS is a pre-requisite for election as a field officer (Deputy Captain, Senior Deputy and Captain). The key firefighting powers available under the *Rural Fires Act 1997*, are delegated by the Commissioner down to field officers. This and many other dynamics make it preferable to have a qualified and experienced officer on-board. The challenge for many brigades is the small number of qualified field officers available for response. That means many brigades' ability to mount a response with an appointed officer is becoming increasingly limited to those few dedicated individuals - in some cases for years, with little prospect of relief.

Compounding this issue is the often complex and time

consuming development of CLS candidates, after all the nature of the role can be quite complex and demanding. We need our field officers to be well-trained and experienced if they are to successfully respond to incidents, establish control, manage the dynamics of a fireground and bring their crews home safely. We also need our developing leaders to be technically proficient and respected by crews. Respect is only earned if those qualified are good at their jobs and if the qualification has been issued in a fair and equitable manner.

This means that the lead-time to develop potential field officers can be long. Many current field officers have reported taking years to go through the complete process.

Why does it take so long? While the CLS course itself takes only a few days, the level of input required to complete post course work and the on-the-ground experience required to prepare a candidate for assessment, is considerable. The course itself cannot hope to cover in detail the number of things incident controllers need to be good at (see topics

covered on page 19). Much of this post course work is left to the brigades, many of whom do not have enough members with the time, experience and knowledge depth to properly prepare their candidates.

The CLS program is aimed at qualifying members to operate as an Incident Controller with up to five units, run a sector or lead a Strike Team within a larger incident. Clearly, being effective at these roles requires good training but also a lot of experience - and, let's face it, other than Section 44 campaign fires, which are largely run by Group Officers and district staff, how many multi-vehicle incidents do we really get to manage at the Crew Leader level? So building up experience has been problematic.

Additionally, many Lake George Zone CLS candidates reported that they had little idea what was expected of them in the role and were reluctant to undergo assessment at all.

Finally, making all the planets align (trucks, crews, weather, locations, scenarios) to provide a realistic CLS assessment is

hard, with often only one or two a year; and sometimes, if there are no candidates ready, there is no CLS assessment event at all. Another year lost.

The net effect has been that Lake George Zone had a challenge of too few CLS members, low success rates at assessments, long lead times, a lack of experience and assessment opportunities and nothing in the pipeline to address the situation.

The Zone needed a solution.

A possible solution?

In mid 2013, Chris Powell, (then) Group North 1 and one of Lake George Zone's longest serving members stepped in with an idea. With the blessing of Zone Manager, Tim Carroll and Learning and Development (L&D) Officer, Peter Weatherstone, Chris proposed setting up a Crew Leader Mentoring Group. The Group would not take the place of the actual CLS course, but would complement it and strongly augment post course work.

To kick it off, Chris talked with local Captains who he knew had interested CLS candidates



ABOVE: CLS Group members and mentors visiting NSW RFS Headquarters at Lidcombe. A whole new perspective on the business of firefighting. OPPOSITE PAGE: A CLS candidate working the radios during assessment. The front left seat of the first arriving unit can be a busy place; providing SitReps, assuming Control, setting up comms and giving orders as the focus shifts from fighting the fire to managing the fireground

Lead time to develop potential field officers can be long



ABOVE: Firecom's training room acted as lower control for the assessment event, simulating the many trucks arriving on scene and waiting to be tasked. A mix of experienced officers and trainees played both HICON and LOCON roles, providing valuable experience to future CLS candidates

They can access the knowledge and experience 'banks' of the senior officers.

keen to move ahead and invited them to the first CL Mentoring Group session in July 2013.

The initial Group was small, perhaps half a dozen attendees. Since then it has grown steadily through word of mouth and has been well supported by Hoskingtown-Rossi Captain, Andrew Hedley, and Stony Creek Senior Deputy, Peter Bavington.

The basic construct settled on was a two-hour, fortnightly session held at a different brigade's station each time – tea, coffee and biscuits provided.

Sessions alternated between practicing core CLS skills, such as fireground management and incident control, and a guest speaker who can lead a discussion and impart their knowledge on a topic of interest suggested by the Group. The Group actively sought out guest speakers from Lake George Zone and from other agencies based on their special areas of interest or expertise. Being conscious of the existing calls on the time of already busy people, speakers are arranged such that no one has more than one commitment per year – unless they volunteer more (which some have done).

The key focus is that of mentoring. Members are free

to ask questions, troubleshoot ideas, discuss experiences, decisions and lessons learned in an open and non-judgmental forum of peers and more experienced officers. They can seek honest feedback as well as access the knowledge and experience 'banks' of the senior officers. Mutual respect and confidentiality are vital for open discussion and learning to take place.

By holding sessions at brigade stations across the Zone, participants are able to rapidly improve their area familiarisation and meet other officers who they will work with in the field. Hosting field officers, for example, are asked to give visiting members a brief overview of their area including: key routes, resources and hazards.

Advertising within the Zone and a helpful memo from the Zone Manager to all captains proved successful and the Group has now grown to over 30 members in 19 months. A subscription only email list has also proved essential for communicating session details and exchanging ideas.

Practice, practice, practice!

One of the useful features of the CL Mentoring Group is the short desktop fire scenario

which begins most sessions. The scenario gives participants practice at being the first responding unit. Each member is given a map extract, marked with a small developing fire and some weather conditions. Members then have 10 minutes to work out what the weather conditions mean, size up the incident then put together a full FTASC situation report and SMEACS orders (see breakout box on page 19) for the first arriving units. It is not a lot of time, but just about realistic when it comes to real incidents. When the clock stops, the group takes it in turns to deliver their SitRep via radio to a notional Firecom across the table. The group then talks through the merits of each SitRep and outlined plan. There is no ridiculing of ideas or plans - that is not what mentoring is all about. Ideas are discussed, possibly better ideas are proposed, lessons are learned and skills are practiced. Any senior officers present may be invited to add their thoughts on how they might have approached the incident with the given weather conditions.

Does it work? Aaron Powell, a CL Mentoring Group member, recently led a crew from the Queanbeyan City Brigade at the 2014 State Championships.

One of the competition stands was set up to test him as a crew leader. He reported afterwards that through his regular practice of this skill, he was able to quickly assess the situation presented to him and deliver a comprehensive FTASC SitRep. From this competition Aaron was awarded the Outstanding Senior Firefighter and his crew awarded a First Place and two Third Places. Even though he has qualified as CLS, Aaron continues to be a regular participant of the Group.

CLS scenario-based assessment

Around March 2014, after nearly nine months, the CL Mentoring Group was progressing well, however, there was one aspect of the original problem that still had not been solved: opportunities for CLS assessment. There was some urgency; AGMs for all brigades were pending within months where new field officers could be nominated for election to fill some of the gaps – if they could be qualified in time.

There were a number of candidates who were considered potentially ready, yet it was now autumn and the weather wasn't very conducive for holding a realistic live fire event.

Newly appointed Group North 1, Mick Fitzgerald, (Chris Powell, having since stepped down) proposed a solution; test-drive a desktop-based assessment. It hadn't been done before and there was some scepticism at first - surely you can't run a meaningful CLS assessment without some actual fire and trucks moving about? While this was certainly acknowledged as a possible weakness, the alternative, given the weather conditions, was to miss another year.

A further change came within the Lake Gorge Zone with the appointment of a new L&D Officer, Darren Marks, in late 2013. Darren recognised the benefits this Group was providing to the Zone and made sure it continued to receive the support Peter Weatherstone had given it. Darren invested the time and support required for Group North 1 to develop

and validate the Zone's first desktop scenario-based CLS assessment to be run in May 2014. He had to ensure that the assessment would be equitable, fair, objective, evidence-based and that any competency granted would be able to be supported by the NSW RFS.

Much work was done developing a scripted scenario, similar to a full IMX that would be run at Zone level.

A large number of people are required to run such an event (activation cells, assessors, higher and lower control – many people on radios). On the other hand, the advantage of a desktop scenario is that such an event is not constrained by the weather, fuel conditions or the need to have extra NSW RFS resources on the ground.

The assessment was conducted by providing a SMEACS briefing to candidates who were then deployed to waiting vehicles. Once seated in their vehicle the radio crackles into life with the first dispatch and the candidate has to simulate the response, starting with their departure from the station. Shortly afterwards a picture of a smoke column is thrust through the window – which should prompt an en-route SitRep.

A few minutes later a map, marked with a nascent fire is handed through the window (possibly accompanied by another photograph), simulating what the Crew Leader can see as the first arriving unit. An on scene SitRep is then sent, including a request for additional resources.

Additional trucks soon start reporting their arrival at the staging area designated by the candidate and asking to be tasked. Orders have to be ready and delivered quickly.

Additional pictures and maps appear from time to time as the situation develops – sometimes things work out according to the candidate's plan and sometimes (scripted) complications arise.

NSW RFS FIREFIGHTERS POCKETBOOK:

This is available as a NSW RFS Pocketbook App as well in print.

Acronyms - FTASC, SMEACS		NSW Rural Fire Service	3
FTASC – Size Up and SitReps (reporting up the line)			
Fire	Type of Incident – Bush, grass, structure, other Location – address and what is it doing Future Location – What will it impact and when		
Threats	What is it threatening – People, property, environment Future Threats – what and when		
Action	What do we need to do now – Offensive or defensive Future Action – What, where and when, offensive or defensive		
Support	What is needed now – Emergency warnings, reinforcements and/or supplies – how much, where and when needed Future Support – What will be needed, where and when		
Command Control Comms	Incident Control System Who is in Control , do we need divisions or sectors Which channels are to be used for tactical and command networks		
SMEACS – a briefing sequence			
Situation	Current and Predicted – incident details, what is at risk, topography, weather, fire behaviour, hazard risks, resources deployed, en route or available		
Mission	Objectives – overall or specific, who/what is savable, where to stop fire/incident		
Execution	Strategy and Tactics – task allocation, timing and safety considerations		
Administration	Assistance and Logistics – what support is needed, staging areas, personnel, fuel, food, water, facilities, information, where/when/quantity		
Command	Command, Control and Communications – organisation, divisions, sectors, chain of command, communications plan, channels and procedures		
Safety	Risk assessment, safety hazards and precautions, LACES checklist, first aid, medical and medevac		

TOPICS COVERED WITHIN CREW LEADER TRAINING (INDICATIVE ONLY):

- Leadership
- Setting up communications to manage the fire ground
- Walk through of major incidents
- Fuel loads
- Heavy Plant
- Aviation
- Fire Weather
- Fire Investigation
- Reconnaissance
- RAFT/RART
- Mapping support
- Navigation
- Role of Brigade Field Officers
- Powers (and limitations) under the Rural Fires Act
- Pre-Incident Planning
- Landholders' perspectives
- Search & Rescue
- Taking part in Zone IMX
- Fire Control Centre
- Operational Support Group
- Log Books and Scribing
- Working and communicating with other agencies:
 - Police
 - FRNSW
 - NSW SES
 - NPWS
 - Forestry Corporation
 - ACT RFS



ABOVE LEFT: Lake George Zone's Operations room acted as higher control for the assessment event, despatching units to incidents and receiving SitReps. ABOVE RIGHT: Working through a 10 minute drill at Boro/Mt Fairy Station

Most volunteers will recognise the 'if you don't use it, you lose it' phenomenon and it is just as valid here as anywhere else.

The assessor watches and listens to how the candidate sets up the fireground and manages the deployed resources to fight the fire. After two hours of highly intense concentration and activity through several short scenarios and one long scenario, most candidates are genuinely exhausted. It certainly doesn't feel simulated. One candidate reported that it had been: "much more challenging than the usual HR based assessment could ever have been".

The assessment ended up working well and four of the eight candidates were deemed competent.

Success factors, lessons learned and other benefits

After running the CL Mentoring Group for 18 months, the Group reviewed its own progress and agreed several points on what makes the Group work well, a few lessons learned and some unanticipated benefits.

The Group runs itself

Right from the start, the Group was run by the CLS candidates themselves yet is only supported by Zone/

brigade officers. The workload of organising venues and guest speakers is handled by volunteers from within the Group which encourages responsibility and leadership amongst the participants. After all, this is what they will be expected to do back in their brigades.

Open up the membership

Originally the Mentoring Group was aimed at Crew Leader Supervisors only. Many of the topics covered, however, were just as applicable and valuable to Crew Leader Wildfire / Crew Leader Village (CLW/ CLV) candidates, so it made sense that the Group broaden its membership to become a Crew Leader Mentoring Group with all crew leaders, qualified or in training, welcome. The added benefit for the CLW/ CLV candidates is that it helped them become aware more quickly of what the CLS requirements are and removed the fear of the unknown which was experienced by many prior to the formation of this Group.

Building relationships

One of the indirect benefits of working regularly with other CLS candidates across

the Zone is building of strong relationships and mutual confidence between brigades across the Zone. Already participants are finding familiar faces getting out of the Crew Leader's seat to liaise as trucks arrive on scene at incidents.

District/Zone support

The Group found it very helpful to receive top cover from the Zone Manager and L&D Officer early on. Establishing the Group as a semi-formal avenue of learning made accessing senior officers and brigades easier as well as encouraging other brigade officers to send their candidates along.

Familiarity

Varying each meeting's location has allowed members to develop a familiarity with other brigades' areas of responsibility, their stations and how to find them. Strangely handy.

Vary the dates

To help as many as possible have the opportunity to attend, the Group agreed to alternately schedule sessions on Tuesdays and Wednesdays with occasional weekend activities. This avoided too many conflicts



ABOVE LEFT: Observing a rescue demonstration during a field trip to Braidwood FRNSW station (236). ABOVE RIGHT: Assistant Commissioner Yorke explaining to the Group how the State Operations Centre functions and the importance of SitReps from the crew leaders on the ground

with some brigade's regular training nights.

Travelling

Most of the Group's meetings have tended to be in the west of our Zone where the largest and most active brigades are – and consequently where most of the CLS candidates are. Over the winter months, however, evening meetings have meant that that some members from the eastern areas have regularly had to travel long distances after work in the dark. Fatigue for these people has been a concern and a risk assessment was considered important to mitigate the obvious risks. Simple treatments are being put into effect such as offering tea and coffee, ensuring sessions are time-limited, not undertaking any strenuous activities during night time sessions, offering NSW RFS vehicles for carpooling and varying the meeting places. More sessions are being scheduled for the eastern part of the Zone with the arrival of daylight savings.

If you aren't ready, you aren't ready

And that's OK. The CL Mentoring Group was

developed to give CLS candidates opportunities to develop, practice assessments and be assessed – not fast track them. It was not designed to push people through assessment before they were actually ready. An environment that encourages honest self-assessment is vital. If a candidate attempts assessment and is found not yet competent, this is not a source of shame or embarrassment. Members are not competing against each other – they are mutually supporting. This mentoring environment has promoted this attitude within the Zone as a whole.

If you don't use it, you lose it

Most volunteers will recognise the 'if you don't use it, you lose it' phenomenon and it is just as valid here as anywhere else. There can be big gaps, sometimes months, between fire calls. When the pager goes off, Crew Leaders need to remember things quickly and under stress, things that were taught months, if not years, ago and rarely practiced. Even after gaining their CLS qualifications, some members continue to

attend sessions to keep the complex skills fresh and ready to hand.

Where to now?

The CL Mentoring Group has taken on a life of its own. Opening up the membership of the Group has increased its scope and its value to the Zone. Not all of the original members are yet CLS qualified which reinforces the original perception that CL, and CLS – in particular, is hard and takes time and dedication to get through successfully. We still have plenty of candidates to build up so the work goes on.

Would you like to know more?

If you are interested in learning more about the Lake George Zone Crew Leader Mentoring Group, please contact Group Coordinator Wendy Hadley of Hoskingtown-Rossi Brigade via email clsm-owner@charvolant.org or check out the NSW RFS Lake George Crew Leader Mentor Group on Facebook.

Members are not competing against each other – they are mutually supporting. This mentoring environment has promoted this attitude within the Zone as a whole.

Review of firefighters' 'yellows'

The NSW RFS has established a working group to review the Bush Fire Personal Protective Clothing (PPC, currently classified as the 'two-piece yellows').

The Working Group is comprised of eleven representatives of the consultative committee, a representative from the Young Members Forum, two representatives from RART/RAFT, a district manager and three staff from Equipment Engineering & Research. The group has four female members. The members of the Working Group cover a wide range of age, experience and geographic locations.

The purpose is to ensure the new PPC meets current and future needs of NSW RFS members in terms of

protection, comfort and functionality, including female specific design and sizing.

The working group will have a finalised PPC design by July 2015, with trial PPC in the field by September 2015. Once the trial is completed and a final design chosen, the new PPC will be put into production in July 2016.

The scope of this review includes:

- seeking feedback from NSW RFS members on the pros and cons of the current bush fire PPC including any issues and ideas for improvement
- a risk assessment of the roles undertaken by members when wearing the bush fire PPC
- an analysis of the current PPC's ability to address the risks identified

- a literature review of PPC design/risk assessment in Australia and overseas
- an analysis of the current PPC's ability to provide protection, comfort and functionality in all situations it is currently being used in
- an analysis of the appropriate balance between radiant heat protection and metabolic heat generation/dissipation
- delivering a PPC design (including fabric selection) that addresses the identified protection, comfort and functionality requirements
- a comparative cost benefit analysis of the new PPC options and the current PPC
- the manufacture of PPC design(s) developed during the review
- the trial of PPC developed

during the review over a minimum three month period by brigade members, RART/RAFT, State Mitigation Support Services and water based brigades.

- seeking feedback from NSW RFS members on the trial PPC
- preparing the final recommendations on PPC design and fabric selection for approval by the NSW RFS.

The scope of this review does not include:

- offensive structural fire fighting
- other personal protective equipment
- repairs and maintenance of PPC.



In March, a meeting of the Bush Fire Personal Protective Clothing (PPC) Review Working Group reviewed the feedback to date from members and brigades identifying PPC issues and suggestions. Review formally closed on 17 April, with the group meeting again to review the final submissions in the following weeks.

The discussion centred around:

- a. Weight of the fabric, with improved breathability and wicking of moisture characteristics.
- b. Design concepts, ie. more tailored / closer fitting cargo-styled pants with more pockets and jackets, being more tailored than current with female sizing as a standard product.
- c. Having a three-piece ensemble that would suit

all NSW RFS activities from firefighting, RAFT to community engagement activities.

- d. The moving to lighter fabrics, to balance out the protection against burn injury and the benefits from lighter fabrics of lower metabolic heat build up (of which we have more instances). Including the shirt as part of the PPC ensemble would counter one of these risks as the two pieces together reduces the potential for burn injury.

As a result of the meeting, feedback and discussion several design options will be trialled in the coming bush fire season. The following three garments with the accompanying characteristics will be designed and constructed for use in the trial.

1. CARGO-STYLE, FITTED PANT

- Fitted waistband
- Elastic insert on sides
- No vent pocket
- Lower rise in crutch
- Button for waist band
- Strengthened pockets with self fabric
- Cargo pockets
- Articulated and reinforced knee
- Ankle cuff with elastic and toggle
- Velcro on pockets with cross stitching for strength
- Deeper flaps on pockets

2. OVER PANTS (current style)

- Elastic and drawstring waistband
- Belt loops
- Vent pocket with zip
- Lower rise in crutch
- Stud for waistband
- Strengthen pockets with self fabric (instead of current calico)
- Cargo pockets
- Articulated and reinforced knee
- Ankle cuff with elastic and toggle
- Velcro on pockets with cross stitching for strength
- Deeper flaps on pockets

3. JACKET

- Squarer back design with 'action' panels – not the raglan sleeve design
- Four pockets on front of jacket

- The contracted vendor demonstrated a jacket they had made for another overseas fire service with a more tailored approach
- One pocket inside of jacket
- Investigate radio pocket or segmenting a pocket (lower left pocket on jacket)
- Include velcro on pockets with cross stitching for strength
- Two radio microphone tabs
- Deep flaps on pockets
- Digital transfer of the NSW RFS logo on rear of jacket (instead of current panel)

Sample garments have been manufactured incorporating the above features. The Working Group reviewed and discussed the sample garments and has requested some minor changes for the next iteration of samples.

The trial, to occur during the next fire season, will consist of 100 members being provided with the sample garments. Fifty members will be drawn from agreed target groups specifically to maximise the garments exposure and utilisation. Another 50 members will be randomly selected from those that have provided feedback via email through PPCreview@rfs.nsw.gov.au.

Comments are still welcome.



The 'yellows' personal protective clothing is being reviewed. Photo by Adam Streichler

Have your say

All NSW RFS members are invited to submit feedback. Submissions can be sent to PPCreview@rfs.nsw.gov.au. For feedback on out of scope items of PPE/PPC and equipment, email equipment@rfs.nsw.gov.au



VILLAGE FIREFIGHTER INSTRUCTOR PROFESSIONAL DEVELOPMENT WORKSHOP

COURSE OVERVIEW

The Village Firefighter Instructor, Professional Development Workshop is an internal NSW RFS program for members who currently assist with VF training or who wish to gain additional skills in order to assist/instruct on VF courses.

It is designed to enhance the knowledge and skills of members, enabling them to further develop their capability as well as provide new instructors with insight into contemporary techniques and training processes.

Course date	Location	Nominations closing date
9th August	Wagga Wagga	7th July
15th - 16th August	Hawkesbury	15th July
12th - 13th September	Yass	12th August

Nominations will be reviewed and prioritised by district and submitted to State L&D. State L&D will review all nominations to ensure fair representation across DTZs.

Nominations where the above entry requirements are not met will not be accepted by State L&D.

Dates and details for all training events can be found on MyRFS.

Course structure

- 2 day training workshop (workshops commence at 0830am on the Saturday and conclude at 3pm on the Sunday)

Qualifications awarded

- Nil. This is a competency maintenance/ professional development opportunity

NSW RFS entry requirements

- Village Firefighter qualified



For further information regarding the Village Firefighter Instructor professional development workshop, please Contact State Learning and Development on 8741 5210 or learninganddevelopment@rfs.nsw.gov.au

THERMAL IMAGING CAMERAS



By Matthew Reeves, Learning and Development Officer

Thermal Imaging Cameras, or TICs, as we often refer to them, are a great piece of equipment and are extremely useful in low visibility environments. Recently the NSW RFS purchased numerous TICs from the NSW RFS and Brigades Donations Fund and distributed them to districts around the state.

Some districts have had TICs in use for many years and would be more than familiar with their use in a structural fire environment. More recently, as the technology has improved, their use in many other environments, including bush fires, has also proven successful.



THERMAL IMAGING CAMERAS

see the unseen



Hotter



Cooler



IN THE NSW RFS THERMAL IMAGING CAMERAS CAN BE USED IN THE FOLLOWING SCENARIOS

DURING RECONNAISSANCE



Thermal imaging from fixed mount cameras on aircraft, provide information back to planners during bush fires. Identifying hot spots in rugged and in accessible terrain allows for ground crews to be inserted and to work these areas with aviation support. The accuracy of the information reduces the time it takes to detect and deal with dangerous hot spots and reduces the risk of re-ignition near containment lines.

FIGHTING STRUCTURE FIRES



Used in conjunction with your knowledge of fire behaviour a TIC can help you interpret the fire behaviour indicators and therefore make the best strategic and tactical decisions. From size-up (reading the heat signature of an external wall to detect the likely 'fire room' or estimating the height of the neutral plane prior to entry) to use during fire attack (detecting ignitions in the overpressure region or the seat of the fire) thermal imaging cameras are a great tool. Use during Search and Rescue, a TIC can be used to see through smoke and detect casualties.

ON THE FIREGROUND



A hand-held TIC can be used to identify hot spots that are not visible to the naked eye, such as smouldering tree roots or peat/mulch fires. At non-fire related incidents, a TIC can be used to identify the source of gas leaks, spot oil spills and to search for lost people in thick foliage and to estimate the fluid levels in tanks.

INFRARED IMAGE



In this image you can see the gray (cooler) shades of the firefighters sitting below the neutral plain and back from the seat of the fire. In front of them you can identify the seat of the fire and fire gases (red) the yellow perimeter identifies fire gases at a lower temperature than those nearer the seat of the fire and they trail off to a gray colour as the are cooled down by hose streams or heat dissipates from them.

KEY FEATURES



Thermal imaging cameras, also called infrared cameras, detect the heat given off by an object, product or person. The energy given off in the form of infrared radiation or IR is not visible to the naked eye, which is why a thermal imaging camera is an excellent tool for firefighters to determine the amount of energy (measured as heat in degrees Celsius) being given off by an object or contained within products of fire, such as pyrolysis gases. TICs record more accurate readings from darker non-reflective surfaces as these radiate more energy, whereas lighter coloured or reflective surfaces radiate less energy (even though both objects may be the same temperature). This demonstrates that TICs are a great tool, but not without their limitations, hence a multi-faceted approach to reading the fire is required.

The varied uses of a TIC include:

SIZE-UP of a structure fire

- Reading the heat signature of a room from outside the structure in order to determine the likely fire room
- Reading the heat signature of a door before making entry

FIRE ATTACK

- Determining the likely seat of a fire, ignitions in the overpressure region and heat signatures of internal doors before making entry into a compartment

SALVAGE and OVERHAUL

- Picking up 'hot spots' within concealed areas and reducing unnecessary exploratory damage

HAZMAT INCIDENTS

- Identifying fluid spills such as oil on a roadway
- Determining fluid levels in tanks and cylinders, such as LPG
- Identifying the source of gas and fluid leaks

SEARCH and RESCUE

- Use during SAR to search for and locate the heat signature of missing persons

RECONNAISSANCE

- Identifying hotspots from the air or on foot

MOPPING UP

- Identifying under surface hotspots from the air or on foot
- Reading heat signatures of smouldering logs and other possible ignition sources
- Identifying hot spots in the mulch fires

TICs have limitations

TICs should not be turned on in extreme heat environments as this will distort the image and give an inaccurate reading. Objects with a low emissivity (such as glass) will not give accurate readings due to their reflective nature. TIC users should make themselves familiar with these and other limitations and never rely solely on a TIC to develop your full appreciation of the incident.

A range of TIC accessories are available, such as retractable lanyards and neck straps. These tools allow the cameras to be carried and used easily, freeing the operator up to undertake other tasks. Attaching the retractable lanyard to a BA set should be done using karabiner on karabiner system, as this allows for easier detachment with a gloved hand.

Like any new technology that we haven't used before, it's easy to make this tool the focus of our actions, which can lead us to ignoring other fire behaviour indicators such as a rapidly lowering neutral plane (an indicator of possible imminent flashover) or creating tunnel vision by only using the images on the TIC as our visual indicator.

Training with a TIC will help make you comfortable with the tool and demonstrate some of its weaknesses as well, such as its inability to see through walls, read reflective surfaces and its limited depth perception.

If you have a TIC on your appliance, give consideration to where it's stowed and whether or not it's available as a first attack tool for your BA team. If you're not sure about the most suitable place to keep it, speak to your relevant local officer, so as to ensure consistency in approach.

Would you like to know more?

If you're a Village Firefighter instructor or a Breathing Apparatus Instructor and would like to know more about Thermal Imaging Cameras and their various uses, consider nominating for one of our instructor workshops (see the workshop information on pages 24 and 29). These workshops include a comprehensive hands-on TIC session. Then you can take your new found knowledge back to your district!



BREATHING APPARATUS INSTRUCTOR PROFESSIONAL DEVELOPMENT WORKSHOP

COURSE OVERVIEW

The Breathing Apparatus Instructor, Professional Development Workshop is an internal NSW RFS program for members who currently assist with BA training or who wish to gain additional skills in order to assist/instruct on BA courses. It is designed to enhance the knowledge and skills of CABA instructors, enabling them to further develop their capability as well as provide new instructors with insight into contemporary techniques and training processes.



Course date	Location	Nominations closing date
1st - 2nd August	Wagga Wagga	3rd July
22nd - 23rd August	Orange	22nd July
29th - 30th August	Gloucester	29th July
19th - 20th September	Mogo	19th August

Nominations will be reviewed and prioritised by district and submitted to State L&D. State L&D will review all nominations to ensure fair representation across DTZs.

Nominations where the above entry requirements are not met will not be accepted by State L&D.

Dates and details for all training events can be found on MyRFS.

Course structure

- 2 day training workshop (workshops commence at 0830am on the Saturday and conclude at 3pm on the Sunday)

Qualifications awarded

- Nil. This is a competency maintenance/ professional development opportunity

NSW RFS entry requirements

- Be currently competent in the use of RFS issued CABA



For further information regarding the BAO instructor professional development workshop, please contact State Learning and Development on telephone 8741 5210 or learninganddevelopment@rfs.nsw.gov.au



New research challenge for Australasia

By David Bruce, Communications Manager Bushfire and Natural Hazards Cooperative Research Centre

The NSW RFS is a leading partner in a \$130 million research centre that draws together all of Australia and New Zealand's fire and emergency service authorities.

The Bushfire and Natural Hazards Cooperative Research Centre (CRC) began in July 2013, as the Bushfire CRC drew to a close after a decade of bush fire focused research.

Of the CRC's 39 main projects, the NSW RFS has major involvement in 22. This includes projects to do with fire spread prediction, building loss, the economics of hazards, volunteer retention and engagement, severe weather prediction, community resilience, hazard communications and multi-hazard damage and loss modelling.

The full NSW RFS involvement, with links to all 39 projects can be seen at the Bushfire and Natural Hazards Cooperative Research Centre website: <http://www.bnhcrc.com.au/organisations/nswrfs> as well as on the NSW RFS intranet and MyRFS website.

The CRC and the NSW RFS have also been involved in other shorter term projects, including post-fire research after the October 2013 NSW fires. The CRC holds an annual conference jointly with the Australasian Fire and Emergency Services Authorities Council (AFAC) each September – in Wellington, New Zealand 2014 and in Adelaide in 2015. Partners in the CRC also have the opportunity to work closely with the researchers twice a year at Research Advisory Forums, one of which was hosted by the NSW RFS in April 2015.

The creation of the Bushfire and Natural Hazards CRC delivers on a key recommendation of the 2009 Victorian Bushfires Royal Commission which called on the Commonwealth to establish a national research centre for bush fire. The CRC is based in Melbourne but partners and researchers are in every state and territory and in New Zealand in a nationally coordinated research program.

Research partners include leading universities, the Bureau of Meteorology and Geoscience Australia. Industry partners include AFAC, the Fire Protection Association of Australia and the Red Cross.

The Chairman of the Bushfire and Natural Hazards CRC, Dr Laurie Hammond, said the CRC is builds on 10 years of high quality scientific research at the Bushfire CRC and is expands the research effort into other natural hazards including flood, earthquake, cyclone and tsunami.

"This investment in research is linked to the National Strategy for Disaster Resilience and will improve approaches to mitigation, operational responses and community resilience to natural hazards," said Dr Hammond.

The CEO of the Bushfire and Natural Hazards CRC, Dr Richard Thornton, said the CRC was largely end-user driven. "The emergency service agencies, departments

and non-government organisations around the country that become partners have a significant say in the development of the research program," said Dr Thornton.

"Importantly, most of the new research is not hazard specific but cross-disciplinary, drawing on the expertise of scientists across a range of fields on issues common to all hazards."

The three broad themes span the priorities for those working in multi-hazard environments:

Economics, policy and decision making – allocating resources for the greatest benefit

Resilient people, infrastructure and institutions – identifying vulnerability, managing the risk and increasing resilience.

Bush fire and natural hazard risks – improving communications, warnings and predictions through more accurate forecasting and modelling.

Highlights of the research program

Improving predictions for severe weather

This project is using high-resolution modelling to better understand and predict important meteorological natural hazards, including fire weather, tropical cyclones, severe thunderstorms, and east coast lows.

Getting a better sense of when disasters will occur

Innovations in the field of remote sensing technology are developing better forecasts of hazard events, better analysis of the pre-conditions to a hazard, and a more detailed and complex analysis of the impacts of actual natural hazard events.

Fire spread modelling

Researchers are developing the science to guide emergency and disaster management organisations to predict the rate of spread and intensity of bush fires across a range of fuel types.

Burning for water and carbon

Fuel reduction burning in eucalypt forests has traditionally focused on impacts to the trees. What is lacking is knowledge of the effects of broader fuel reduction burning on fuel loads, and on carbon and water storages.

Engaging and retaining our volunteers

Spontaneous volunteering by largely untrained and unaffiliated community

members has become a significant issue for governments and the emergency service agencies. Can non-traditional forms of volunteering be called upon as a surge capacity as natural hazards events become more frequent? Elsewhere, volunteers are the backbone of the emergency services sector but agencies are grappling with how to avoid the high attrition rates that increase costs and reduce their organisations effectiveness by relying on a small overworked core of volunteers. How can organisations reverse this trend?

Planning to make the right responses when disaster hits

Communication of risk and warnings are central to our natural disaster response. This project is developing ways for better planning and preparations that will lead to safer responses during disasters and will allow for better recovery after the event.

Understanding the tsunami risk

Tsunamis are less common in Australia, which presents a problem for emergency agencies educating or warning the public of a risk that has a low likelihood of occurring but a high impact if it did. This project is devising ways to better engage the Australian public on tsunami risk.

Working with fire in Top End communities

Researchers are working with local communities in northern Australia to build on the

existing knowledge of bush fires and other natural hazards to better deal with risks across the region.

Building better infrastructure

Inappropriate or outdated buildings in regions prone to bush fires, earthquakes, cyclones or floods, can exacerbate the impacts of natural disasters. Researchers are examining what good building looks like and how it can be achieved across communities.

The politics of natural hazards

Policy decisions made by all levels of government on emergency management may help or hinder the ability of communities to prepare for or respond to natural hazard events. How can the responsibility for community safety be a shared responsibility? How can the impacts of natural hazards be reviewed to help communities prepare for future events and not just focus on past ones?

Counting the costs

What are the financial implications and benefits across a range of options in natural hazard management? How do we calculate the full costs of damages from natural hazard events across all sectors of industry and agriculture?

Searching our past to see our future on fatalities and building loss

Searching databases back to European settlement in Australia, researchers are

analysing the trends in building damages, fatalities and injuries caused by natural disasters. These trends will be projected into the future in the context of emerging issues such as an ageing and shifting population and a changing climate.

Preparing for the worst – always including children

Researchers are conducting a comprehensive review of disaster management plans across Australia to ensure they are child-centred.

Managing animals in disasters

Domestic pets, commercial animals, livestock, and wildlife – communities under threat place a high value on providing protection for their animals, often at great risk to themselves. Researchers are developing guidelines and training for policy developers and emergency service responders to ensure animals are integrated in public safety education and messaging.

Keep in touch

For more details visit www.bnhcrc.com.au, and keep up to date by liking the Bushfire and Natural Hazards CRC on Facebook, and following on Twitter.

More information about the NSW RFS involvement in research please contact research@rfs.nsw.gov.au



LEFT: Executives from the participating agencies and the BNHCRC at the Centre's launch: (L-R) Dr Laurie Hammond, Chair of the Bushfire and Natural Hazards CRC; Tony Graham, ACT SES Chief Officer; The Hon Michael Keenan MP, Federal Minister for Justice; Shane Fitzsimmons, NSW RFS Commissioner; Richard Woods, ACT RFS Operations Manager; Stuart Ellis, AFAC CEO and Dr Richard Thornton, Bushfire and Natural Hazards CRC. Photo by the Bushfire and Natural Hazards CRC

OPPOSITE PAGE: Multi-agency task forces including CRC researchers and fire agencies are set up to gather information from the field. Photo by the Bushfire and Natural Hazards CRC



AFSM awards

Australia Day 2015

AUSTRALIAN FIRE SERVICE MEDAL RECIPIENTS

Superintendent **Kevin Adams** MIA Zone

Superintendent Kevin Charles Adams was initially employed with the Murrumbidgee Shire Council in 1989 with some of his duties involving Fire Management of the area. In 2013 Kevin also took over the management of the NSW RFS in Carrathool and Hay.

Throughout Kevin's period of service, he has demonstrated exceptional leadership, commitment and has been largely responsible for the MIA Zone's excellent performance in a variety of functions. He has extensive experience in grasslands and forest fire fighting and at all times has shown a mature attitude in emergency situations. Kevin Adams has given distinguished service throughout a period of some 20 years in fire management. He has pioneered some initiatives that have evolved in very successful outcomes and to this day, he continues to initiate and embrace positive ventures for the NSW RFS within the MIA Zone and beyond.

Group Captain **Peter Conn** Orana

Group Captain Peter Warwick Conn joined the NSW RFS as a volunteer firefighter with the Comobella Brigade in 1979. Peter was elected as a Group Captain in 2001 a position he still holds. As a senior volunteer he is well known and respected by his peers in the Orana Senior Management Group and his advice and assistance is regularly sought by members of the group. He regularly volunteers his service above and beyond that expected of a Group Captain. Peter's performance in all aspects of his role as Group Captain and as a volunteer is well above that expected. His devotion to duty, leadership, loyalty and unselfish performance of his role is beyond question. These along with the example he displays and the integrity he shows are deserving of the highest recognition.

Captain **Harmen Kampman** Far South Coast

In 1960 at the age of 18, Harmen Kampman joined the Candelo Brigade of which he has now been a member for 54 years. On 1 January 1975, Harmen was appointed Captain, a position he has held now for 39 years.

The achievements of the Candelo RFB in the past 20 years, a time of enormous change, have been under his leadership. He has overseen construction of a new facility, the upgrading of vehicles, the implementation of constant training and above all the solid growth in volunteer numbers including the introduction of junior membership which currently numbers six junior members between 13 to 17 years of age. Harmen constantly demands the best and gets it. His team respect him for his knowledge, leadership and direction. Likewise within the Zone he is highly regarded for the manner in which he conducts himself and for his knowledge and commitment to the NSW RFS.

Superintendent **Jayson McKellar** Lower Hunter

Superintendent Jayson McKellar joined the NSW RFS in 1986 as a cadet member of the Blue Mountains Headquarters Brigade and over the coming years rose to the rank of Senior Deputy Captain. In 1994 Superintendent McKellar joined the NSW RFS as a member of staff and today he is the District Manager for the Lower Hunter Zone. Superintendent McKellar has distinguished himself in the areas of Training and Operations in Singleton, Port Stephens and Hunter Valley areas. He successfully managed the amalgamation of several districts to form the Hunter Zone and the Lower Hunter Zone. Throughout, Superintendent McKellar has pursued his passion for Aviation and has become one of the most experienced bush fire aviation officers in the country. Superintendent McKellar is also a very well respected Incident Controller, who has managed numerous large and complex bush fires in NSW and beyond.



Kevin Adams



Peter Conn



Harmen Kampman



Jayson McKellar

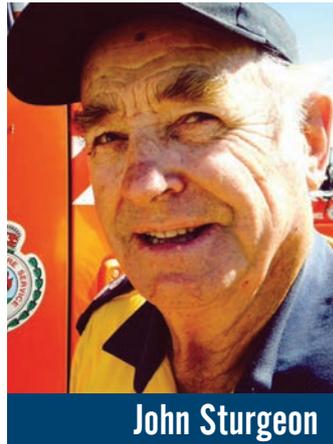
For more information about the Australian Fire Service Medal see: www.itsanhonour.gov.au

AUSTRALIAN FIRE SERVICE MEDAL RECIPIENTS

CONT.



Craig Robertson



John Sturgeon



Ralph Walker

Group Captain **Craig Robertson** Illawarra

Group Captain Craig Robertson commenced service with the Engadine Brigade in February 1983 and has since provided 31 years of continuous and outstanding service. Craig has attended many significant incidents in a leadership capacity as Strike Team or Task Force Leader including major fires in Sydney (1994), Wollongong (2001) and Canberra (2003). He provides and promotes motivational leadership and recognises the strength found in cohesion between brigades and individuals. His proactive approach to leadership, results in outstanding cooperation, understanding and performance. Craig has always been very active in Community Engagement activities including setting up the State's first dedicated Community Safety Brigade in 2007. Craig consistently and positively promotes the NSW RFS and has resulted in him being a great ambassador for the Service.

Group Captain **John Sturgeon** Canobolas

Group Captain John Sturgeon has been a dedicated member of the NSW RFS since joining the Lidster Brigade as a teenager under the supervision and guidance of his father, Thomas. John has remained in the Lidster District and today is a well known and respected cattle producer. John was elected as a Group Captain for the newly formed Canobolas Zone in 2001, a role he holds today. He has attended many local fires during more than 50 years of service and his most memorable fire was the emergency declared fire at Mt Canobolas in 1986 when he was integral in establishing containment lines which assisted greatly in the fire containment. He was also instrumental in creating the Nashdale, Canobolas and Lidster Brigades training cooperative to enable those brigades to work formally together and he is a great mentor to younger members. John's leadership is held in very high regard by all brigades in the Canobolas Zone.

Firefighter **Ralph Walker** Lower North Coast

Firefighter Ralph Walker joined the Gladstone/Smithtown Brigade in 1993. He was appointed Captain in 1996, a position he held continuously for 18 years. Ralph has attended most bush fires and incidents, motor vehicle accidents and structural fires within the Kempsey Shire area over this time as well as many out-of-area deployments such as the 2009 Black Saturday bush fires in Victoria. As Captain he was greatly involved with assistance to State Emergency Service in the relief of residents on the lower Macleay River during many floods. He has also been instrumental in the raising of funds and the construction of the present brigade station. Ralph has been involved in the Rural Fire Service Association (RFSA) for over 15 years. In this role he was appointed to many consultative committees including Australia and New Zealand Standards with regards to the development of Personal Protective Equipment for firefighters.

Clever ideas in community engagement

Inspiring residents about bush fire safety often takes some innovative thinking. Here we feature of the smart ideas that brigades from across NSW have come up with to get the message across.



ABOVE: A great example of using the arts to get the bush fire safety message across to children. Rehearsals for *Smoke is in the Air* at the Glenorie Public School. The Brigade Kids are all children or grandchildren (or both!) of brigade members from Glenorie or Maroota South Brigades. (In alphabetical order) Jordan Crocker, Kaegan Hugo, Kalhoun Hugo, Toby Rowe, Felicity Whiteman, Rowan Whiteman, Jack Yard and Crystal Yard. Photo Elizabeth Whiteman

Four clever ideas in Community Engagement

Using arts to get the message across

At the 2014 Australian Community Engagement and Fire Awareness (ACEFA) Conference in June, Country Fire Authority volunteer and creator of the Captain Koala and Friends Show, April Himmelreich, explained the success her brigade has been enjoying using music to communicate fire safety messages to children.

Empowered and inspired by what they had heard, volunteers from Glenorie Brigade, led by the Brigade Community Safety

Officer Elizabeth Whiteman, have written and produced a song called 'Smoke is in the Air'.

"As part of the lead-up to Open Day this year we took the children from the brigade to the end of term assembly at Glenorie Public School armed with a song," (previous page) Elizabeth said, "The aim was to teach the song to the children, teachers and parents."

"We only had three half-hour practice sessions (with the last cut short by a fire call!) - but it

went incredibly well. All 250 kids at the school were singing the song as they returned to classrooms!"

"After the assembly, we gave all the kids a 'Planning to Make a Plan is Not a Plan' sticker and brigade members chatted to the parents about their bush fire survival plans."

April Himmelreich's presentation at the 2014 ACEFA Conference can be viewed at: <http://new.livestream.com/nswrfs/ACEFA/videos/62884893>

Ember Attack Demonstration

Helensburgh Brigade has made a habit of creating innovative demonstrations to attract community members to its Open Day. In 2014, a number of members got together to create an 'Ember Attack' demonstration unit.

Using recycled material from around the station and some supplies donated by one of the members, they have built a display that is not only

entertaining for the community, but conveys a number of key preparation messages such as the importance of cleaning, gutters before and during the bush fire season.

A video of the demonstration was uploaded onto Community Engagement Facebook page and within the first few days 'went viral' receiving over 8,000 views – the highest performing post on the Community

Engagement Facebook page since its introduction in 2010. It was shared among NSW RFS Brigades as well interstate agencies, like the CFA and Tasmanian Fire Service and even the U.S.

To see the display in action visit the Community Engagement Facebook Page: facebook.com/nswrfscommunityengagers

Communicating bush fire risk

How can we show our community what a bush fire is like without actually having a bush fire to show it?

The NSW RFS Southern Border Team has built a Bush Fire Awareness Burn Table to answer this question. The burn table is a new addition to the teams,

Community Engagement tools and is used to educate residents on fire behaviour. The burn table uses interchangeable pieces covered with hessian to depict the grasslands, vegetation, fuel loads, properties and fire breaks. Residents can watch as the fire moves faster up hills, the flame height increases when feeding

off the fire fuels and can observe the intensity of the flames decrease when it hits strategic fire breaks.

To see the display in action visit the Community Engagement Facebook Page: facebook.com/nswrfscommunityengagers

Saving lives, one smoke house at a time

The new inflatable smoke house is a state-wide resource provided by Community Engagement Team. The smoke houses were launched in August 2014; are two units are available to brigades.

Developed to simulate the conditions inside a house during a fire, it teaches children the basics of survival in an emergency such as recognising that smoke alarms provide a warning of smoke and demonstrating safe behaviour, such as crawling low in smoke to an exit.

One of the new smoke houses was used at the Westleigh Brigade's 50th Anniversary Open Day in August 2014.

"It is really easy to operate," said Adam Streichler from the Westleigh Brigade. "It takes about 30 minutes to setup and the same to pack down with 3-4 people."

"We set it up on the Friday afternoon, ran it and then packed

it away, to ensure it was easy for us to get it ready under time pressure on Saturday morning. I definitely recommend that brigades do this, as we knew exactly what to do before we opened the station on Saturday.

"We received some really great feedback from members of the community, parents, grandparents, members of other brigades, about how important it is to teach children the basics of get down low and go, go, go and how this feature allows that to be taught safely. We also educated kids on stop, drop, cover and roll as they exited the house. We could hear parents speaking with their kids afterward with questions like 'so what would you do now if you woke up in the middle of the night and there was smoke in the house?' So we could see that the message was being received successfully."

Urbenville Brigade also used an inflatable smoke house unit

recently for a visit to the local public school. Feedback from the school was glowing:

"WOW!," wrote the Urbenville Public School teacher "There are just no words to describe the happiness and joy I saw on the faces of the kids this afternoon as you all offered them such a brilliant learning experience. Thank you so much for spoiling them with the excitement of the smoke house, fire truck tour, use of fire hoses and even show bags full of treats too! You saved lives today. Who else can claim that at the end of the day? Thank you so much Urbenville RFS!"

The inflatable smoke house units are an excellent resource to communicate, especially to children, about fire safety. Contact community.engagement@rfs.nsw.gov.au if your brigade would like to book the unit.



Game changer

The impact of the October 2013 fires on the children's
services sector in the Blue Mountains

By Red Cross Recovery Project Officer Danielle O'Hara
and Blue Mountains Community Engagement Coordinator Andrew Kaye



The success of the workshop had a lot to do with the determination of the children's sector members...NSW RFS supported, rather than led.

Some of the most potent behaviour change can occur after a large fire incident. In the recent issue of the *Bush Fire Bulletin*, Rainbow Pre-School Director Joan Murray emotionally recounted her experiences of the Linksview Road fire at Winmalee (Vol 30, No. 2, p.40) when her centre, staff and the 13 young children came very close to disaster. This was just one example of at least three schools which were directly affected by the Linksview Road fire.

The fire event triggered a strong response from the community and in a tremendous example of community-led action, children's services across the Blue Mountains actively sought to prepare themselves for future fire events.

Providers identified that they wanted to workshop their emergency plans with experts from local emergency services agencies. In response to the call for action in July 2014 the Australian Red Cross Recovery Project Officer, Danielle O'Hara hosted a workshop titled *Planning for Emergencies for Children's Services in the Blue Mountains*. The NSW RFS supported the workshop and continues to provide direct advice to the children's services sector.

The Planning for Emergencies workshop was planned with input from emergency service agencies, local government, children's services and community service providers.

Forty-five individuals from different services were represented on the day, including pre-schools, community pre-schools, Out of School Hours (OOSH) services, family support services, community long day care, occasional care services and family day care.

The Red Cross facilitated the workshop with assistance from NSW RFS, NSW SES, NSW Police Force, Fire and Rescue NSW, the Local Emergency Management Officer (LEMO) and Regional Emergency Management Officer (REMO), Department of Family and Community Services (FaCS) as well as from Blue Mountains City Council and Mountains Outreach Community Services.

The one-day workshop was highly interactive with maximum participation from all present. Due to the experiences of many services in the October 2013 bush fires, a number of issues were highly charged and it was important to deal with these sensitively.

At the completion of the workshop, 100 percent of attendees agreed or strongly agreed that they felt confident that there were changes their services could make to be better prepared for bush fire.

The participants identified the following highlights:

- Realising we have to take responsibility and be self-sufficient
- Real experience from Rainbow Pre-School
- Building networks
- Sharing plans with other services and experts
- Emergency services participating and listening to our concerns

The various children's services were asked to identify the top three things they would change as a result of the workshop. Some of these included:

- Improve policies and procedures such as: revise emergency preparation plan to include triggers and goals rather than procedures;

- Engage staff and families in the development of personal evacuation plans in the case of an emergency, such as: consult with staff and families regarding their personal plans and how they affect the Centre's plans;
- Investigate and make plans for alternate evacuation destinations in various possible scenarios such as: updating the bush fire plan, making it more flexible, more specific (concrete triggers) and include methods of communication;
- Check Fires Near Me App during peak season. Put up Apps and website details in office;
- Establish contact with local NSW RFS;
- Review and practice emergency evacuation drills and check packs, practice emergency procedures under different scenarios.

Andrew Kaye, Community Safety Coordinator at the Blue Mountains District represented the NSW RFS at the workshop. He outlined the need to review bush fire survival plans and give serious consideration to the fact that there may not be a 'big red truck' on their doorstep in a crisis.

A few of the key messages were that:

- Plans must be flexible enough to allow adjustments, depending on the timing, direction or intensity of a fire event;
- A shelter-in-place option must be considered when determining alternate actions; and
- Staff members at a children's service must be proactive in obtaining the most up-to-

date information during an emergency in order to make informed decisions.

In the course of the workshop participants were taken through a scenario of a fire taking off in hot dry conditions and over a period of 24 hours approaching a child care centre. After each update of the scenario, participants were asked to consider their responses, actions and plans.

"I am confident that the sector has a heightened awareness of the dynamic nature of bush fire events now," Andrew Kaye said, "and that they are clear that the emergency services cannot guarantee direct support at every children's service."

"It has been great to support an initiative that rose out of the local community's concern," he added, "The success of the workshop had a lot to do with the determination of the children's sector members, Blue Mountains City Council and Red Cross. The NSW RFS supported, rather than led the event."

Not only did the NSW RFS have a valuable opportunity to advise about fire safety, all the emergency services present at the workshop also gained a greater understanding of the practical issues and concerns of the children's service sector.

NSW RFS staff and volunteers are now providing direct local advice and support to children's services as a consequence of this workshop, including a review of their emergency plans and providing suggestions and assistance.

Fire scenario

The following scenario and updates were presented to help the children's service providers test their plans in the event of a fire emergency. Facilitators used a set of questions to promote discussion around each element of the scenario. The scenario was broad enough to be of potential impact to every participant.

Tuesday, 11:00am

With temperatures soaring over the past week, plus a rise in winds and a significant drop in humidity levels, most National Parks have been closed to bush walkers and campers. Some parts of NSW are under Total Fire Bans, but not in the area of your Service. Media outlets are reporting that the NSW RFS and other fire agencies have responded to and contained several small bush fires in remote areas. The Bureau of Meteorology is advising that the combination of dry fuels, continuing hot conditions and no rain has drastically increased Fire Danger Ratings across the state. It is possible that a Total Fire Ban will be declared for tomorrow (Wednesday).

Questions

1. Who is responsible for monitoring a bulletin from the Bureau of Meteorology about Fire Danger Ratings? How would they receive this information? Do they know the meaning of a 'Severe, Extreme or Catastrophic Fire Danger Ratings, and what each rating level may mean for the children's service?
2. What information are you sharing with teachers and other staff and parents at this time? Who decides when and how to share this information?
3. What, if any decisions need to be made at this time, who needs to make them and when do they need to make them?

Tuesday, 5:30pm

A fire is reported about 25 kilometres away and roughly north-west of your service. Both NSW RFS and National Parks and Wildlife Service firefighters are working on the fire. Pushed by strong winds, the fire is spreading rapidly through rugged, forested lands in a south-easterly direction. Several remote buildings and equipment sheds have already been destroyed. Heavy smoke has reduced visibility and air quality, and a major electrical transformer has been destroyed by the spreading fire, causing widespread power outages. Local radio, newspaper and websites report that the Incident Controller has stated that fire agencies are confident that containment strategies being applied to the fire will be successful overnight. A Total Fire Ban has been declared from midnight Tuesday for 24 hours.

Questions

1. What are your immediate actions and priorities?
2. What is your service communicating to teachers, other staff and parents and the declaration of a Total Fire Ban? What responses would you anticipate from staff and parents?
3. What expectations do you have regarding teachers and other staff attendance at work under these circumstances? Under what circumstances would you consider closing your children's service?
4. Do you have a process in place to account for all your teachers, other staff and visitors? If people cannot be located or contacted, what, if any, processes do you have to account for them?
5. What, if any, decisions need to be made at this time, who needs to make them and when do they need to make them?

Wednesday 11:00am

Local radio, Facebook and websites report that the Incident Controller has stated that the fire has broken containment lines under strong north-westerly winds, is now out of control, and will impact settled areas over the next four hours. The fire is less than five kilometres from your location. Under the current Extreme Fire Danger Ratings, spotting can occur up to three kilometres ahead of the main fire. Intermittent power outages continue and are likely to worsen.

Local fire brigade resources are fully committed to protecting lives and property near the head of the fire. Additional resources are being sent from adjoining areas, however there is limited capacity as fires are also burning in those other areas.

Police, other emergency services and local council are managing a range of issues associated with the now out-of-control fire, including traffic management and support to a primary school and aged care centre close to the potential fire impact area.

Questions

1. What will conditions be like at your service? How will staff, parents and children be responding?
2. Will you continue operations? What critical services do you depend on (e.g., power and water)?
3. Do you consider sheltering in place? Do you consider evacuating the service? What is your trigger for making this decision?
4. Can you access copies of your vital documents, such as children's records, parent contact details, insurance papers and organisation financial information?
5. How are you communicating with teachers, and other staff regarding the current fire situation? Will any staff want to leave the service to support family or friends under threat, or to protect their own property?
6. Who is assigned to keep up to date about the fire situation, and how will that be done?
7. How are you communicating with parents about the current fire situation and your decision to either shelter in place or evacuate? How do you contact parents if power fails?



all the emergency services present also gained a greater understanding of the practical issues and concerns of the children's service sector



WE WILL **REMEMBER** THEM.
LEST WE FORGET.

Lest we forget

From the smallest towns to our largest cities, communities all over NSW commemorated the centenary of ANZAC Day.

This day marked the centenary of the landing at Gallipoli by ANZAC forces in World War One. Australians were quick to respond when the call for voluntary recruitment for the Australian Imperial Force (AIF) went out on 10 August 1914. Less than three months later, on 1 November 1914 the first AIF contingent of 30,000 troops and 14,873 horses sailed from Albany, Western Australia on their way to Egypt.

In 2015 across NSW many members of the NSW RFS played key roles in the ANZAC Dawn Services and Marches.

Many ANZAC events broke records for participation. The spirit of remembrance could be felt just as keenly in some of the smaller towns, where small groups braved the early morning rain to march down their main street.

The evocative tradition of the Dawn Service was held in many locations including on the Central Coast where the service was held overlooking Terrigal Beach. Wamberal Brigade member Tanya Shepherd wrote: "The Dawn Service was absolutely beautiful, even more special for me as I got to march beside my husband who is an Afghanistan Veteran."

A beautiful ANZAC Day was held in Cobar as the community gathered to pay

their respects. Members of the Far West Team including three brigades and their captains marched. Beside them were some special ANZAC nurses, some 'bushies' and a beautifully restored old fire hose cart. Cobar HQ Brigade Captain Tony Lord paid tribute to the diggers by dressing himself and his horse in the AIF uniform and equipment of the day (see page 42.)

Hornsby, in Sydney's north, saw a large crowd gather at the local Cenotaph with many nearby brigades represented.

"It was an honour to march this morning at Hornsby's Dawn Service," said a member of the Westleigh Brigade, "I have so much respect for our servicemen and women.

We will remember them. Lest we forget."

Kenthurst Brigade in Sydney's north west also saw a large turnout.

"Our brigade played a major part in the activities," said firefighter Bill Duncan, "helping set up, securing march route safety, marching as an 'honour guard' for the veterans in the parade itself, providing the speaker for the keynote memorial address and even having our children and grandchildren involved in roles like leading the march carrying the Australian flag and placing wreaths."

One member of the Kenthurst brigade, Ray Hancock, known as Biggles to the brigade members,

provides a poignant example on ANZAC Day.

"He is the pride of our brigade," said Bill, "Who he is and what he has done, provides an example for us all to follow. Biggles' life as a volunteer started in 1940 when he was only 14 in the UK during the Second World War. He was a motorcycle dispatch rider for Coventry's emergency fire services during the Blitz. His skill and courage as a junior volunteer fireman foreshadowed his later exploits as a fighter pilot."

Further west, members from Dubbo HQ and the Orana team marched in the Dubbo ANZAC Day parade to pay their respects. The local Dubbo community turned out in massive numbers for the both the dawn service and the March.

Members of the Southern Highlands Team marched in the Picton ANZAC Day Service and March. The number of NSW RFS members marching was the largest to date with more young members than ever participating. The overall attendance at the Picton service broke all records. Amanda Cash from the Southern Highlands Team wrote: "It was a great service and made me very proud to be an Australian and proud to call the Southern Highlands home. Thank you."

In the Blue Mountains, Lawson's 2015 ANZAC Day services were attended by an estimated 1,500 people including several members

of the local brigade. In other parts of the Mountains NSW RFS members were busy behind the scenes helping cook breakfast for the local RSL or providing traffic control for the March.

Gulmarrad Brigade, Cooranbong Brigade, Coramba and Cooks Gap Brigades all participated in local marches.

Across the Lower Hunter where floods and storms had so recently devastated the area, ANZAC ceremonies still went ahead. At dawn, a single bugle player stood at the edge of flood waters in Maitland and performed the Last Post.

The Beacon Hill Brigade held their largest ever ANZAC ceremony despite being affected by storms in the week before. It was especially challenging given that the Peace Park where the ceremony was held had no power due to the recent storms. The NSW RFS provided alternative power and lighting for the service.

The spirit of respect and remembrance was felt across the state and throughout the NSW RFS. Noel Townsend from the Lake Team summed it all up.

"Our brigade attends the dawn service and the march down the main street every year. This has been a proud tradition for us. We are honoured to pay our respects for those who fought and died for our freedom. I think it's the very least we can do. Lest We Forget."



Forged in the furnace of war

By Major RW Duncan (ret.), Member of Kenthurst Brigade

There is something special about ANZAC Day.

It is more than a reflection on our history, it is about appreciating who we really are as a people and as a nation.

Yet our understanding is often confused. Wasn't the Gallipoli campaign a disastrous defeat?

One hundred years or more ago, in the years leading to Federation, Australians lived in a land characterised by a collection of separate British colonies. The State colonial legislatures each owed their allegiance to London. They sparred with each other, competing for status, trade and resources. Internally our society was divided by social and political tensions. Even after Federation there was little sense of national identity.

But when the war broke out with Germany in 1914, Australia and New Zealand were isolated. Alone and apprehensive.

After April 25 1915, when those brave volunteer soldiers lay dead in the ridges and gullies above ANZAC Cove at Gallipoli, they were no longer Victorians or Tasmanians nor Aucklanders or Wellingtonians - they were Aussies and Kiwis. They were members of the Australian and New Zealand Army Corps – ANZACs.

Out of this horror grew other things: selflessness, comradeship, unity and an indomitable spirit.

Nationhood had come at a terrible price, but nationhood it was.

To help us better understand the importance of those events one century ago, let us listen to the words of the most articulate and revered Australian of his era: Andrew "Banjo" Patterson in his poem, We're all Australians Now:

Australia takes her pen in hand

To write a line or two

To let you fellows understand

How proud we are of you.

....

The mettle that a race can show

Is proved in shot and steel.

Now we know what nations know

And feel what nations feel.

Our Old World differences are dead

Like weeds beneath the plough.

For English, Scot and Irish bred,

We're all Australians now.

While Australians and New Zealanders do not glorify war, we have learned its hard lessons.

In the 1900s our service men and women responded to the threat of 'imperial' aggression....Today our soldiers, sailors and air men and women protect the poor, oppressed and disadvantaged against petty warlords, terrorists and natural disasters. We fight not to conquer but to defend.

Forged in the furnace of war and honed on the anvil of trial and tragedy in peace the spirit of ANZAC lives on.

An excerpt from the Memorial Address at the Kenthurst ANZAC Day Ceremony 25 April 2015

ABOVE LEFT: Cobar HQ Captain Tony Lord dressed in 1915 digger's clobber for the ANZAC parade in Cobar. Photo by Jane McLeod.
 ABOVE CENTRE: Kenthurst ANZAC March. Photo by Trish van Tussenbroek



**WE WILL REMEMBER THEM.
LEST WE FORGET.**

Hornsby's growing tradition

By Ian Burnet, member of Clarence Town Brigade

When, in 1995, Australia commemorated the 50th Anniversary of the cessation of World War II - Australia Remembers - the Hornsby Brigade (formerly known as Headquarters RFB) was asked to participate in the Hornsby RSL Sub-branch's commemorative services. The first service commemorated victory in Europe and was held in May 1995. About nine members turned out. At the second service commemorating victory in the Pacific, held in August that year, our ranks had grown to over 30. We proudly marched up the Pacific Highway behind the veterans with Hornsby Cat 1 bringing up the rear.

We were very well received at the time and invited back to the Hornsby RSL Club for refreshments. We were also asked to join in future ANZAC Services.

Since 1995 Hornsby Brigade has been active around the ANZAC Services and other brigades in the Hornsby District have supported us.

Hornsby RSL Sub-branch has an ANZAC Sunday Service held on the Sunday prior to ANZAC Day. This attracts a lot of ex-service personnel and residents. The NSW RFS takes part in the colour party, marches as a group and transports chairs for the assembly to use. The Service personnel look very smart in yellows and NSW RFS uniform, some wearing service medals and decorations. This is all repeated at the ANZAC Day Dawn Service and the RSL is never short of volunteers, even with the 4.30am start! A wreath is laid by an NSW RFS member.

In 2014, the Dawn Service saw the largest NSW RFS attendance ever, and with over 100 members turning out we had to form up in four ranks. NSW RFS Commissioner, Shane Fitzsimmons, proudly led the NSW RFS contingent. We joined in the largest ANZAC Dawn Service that Hornsby has seen for a long time with over 500 veterans, serving and ex-service personnel and other community organisations. NSW Police Force estimated the crowd to be over 2,500.

While the Dawn Service was being conducted, the Hornsby Catering Brigade were busy in the Hornsby RSL Club, along with their SES mates, Scouts, and Guides, preparing a 'gunfire breakfast' for the 1,800 people who came back to the club.

Also in the Hornsby Shire, Brooklyn, Dangar Island, and Milsons Passage Brigades all support the Brooklyn RSL Sub-branch and Berowra Brigade supports the Berowra RSL Sub-branch with their ANZAC Services.

The Centenary of ANZAC in April 2015 was the biggest turnout yet in Hornsby with over 10,000 people attending, and over 120 RFS personnel marching. We are proud that this tradition continues to grow.

Ian Burnet is a member of Clarence Town Brigade, and a life member of Hornsby Brigade. He is on the Hornsby RSL Sub-branch Committee as a Custodian of the Cenotaph in Hornsby. He has been a member of the NSW RFS since 1976.

ABOVE RIGHT: Ray Hancock, Biggles, presents the flower wreath at the Kenthurst ANZAC Ceremony. Photo by Trish van Tussenbroek

Ready to respond

Community Fire Responders are a growing group within the NSW RFS. Up to the minute training is vital in this life-saving role and training exercises are held every six months to keep these volunteers ready to respond. Community First Response Coordinator Alison Moad reports here about the success of the program within the NSW RFS.



Boat Accident Training Exercise at Xtreme2 Weekend. Photo by Simon Pogorituschnig

The Community First Responder (CFR) program is a vital emergency medical response program administered by Ambulance Service of NSW and provided by emergency responders and community groups, including NSW RFS volunteers in regional and remote areas of NSW.

Five NSW RFS brigades are involved in the CFR program: Mount Wilson, Scotland Island, Putty, Howes Valley and Bulga. Not every brigade member is required to be CFR trained. Some of our combined CFR/Rural Fire Brigades have only a small number (generally 10 volunteers) of their total membership trained in CFR.

NSW RFS CFR members are trained in Ambulance Service of NSW protocols to provide a quick initial local response to Triple Zero (000). They provide initial emergency care and sustain life until the arrival of paramedics. CFR units have been successfully established where a permanent Ambulance station presence is not always possible or is located some distance away.

NSW RFS CFR volunteers also have the opportunity to attend a multi-agency training weekend twice a year, allowing them to network with CFR members from other agencies including Fire and Rescue NSW, NSW State Emergency Service and community groups. These weekends give our volunteers the chance to learn new treatment skills and gain knowledge from the various practical medical scenarios.

A number of NSW RFS CFR volunteers attended a training weekend in Coffs Harbour in March 2015 as part of the 'Xtreme 2' exercise. The

exercise included members from NSW RFS, NSW State Emergency Service, Fire and Rescue NSW, Ambulance Service of NSW, NSW Police Force, Marine Area Command and local drama students who acted as patients.

The exercise consisted of a number of realistic scenarios during which a CFR unit may be required to respond. These scenarios included:

- severe burns victim
- fatal motor vehicle collision with multiple victims and injuries
- heart attack victim
- mental health crisis
- rock fall victim
- boat propeller accident victim
- fatal motor vehicle collision with multiple victims and injuries
- water rescue.

NSW RFS CFR volunteers were split into multi-agency response teams and worked through the various scenarios. This included the treatment of patients, practical application on filling outpatient health care records and protecting themselves against potentially dangerous situations. Additionally, participants gained skills in contingency planning and clinical decision-making.

The feedback received from the NSW RFS CFR volunteers was extremely positive.

"Being both a firefighter and CFR volunteer can be challenging," said Jodie Green from Howes Valley Brigade, "time management, work commitments, training and family all need to be considered."

"The satisfaction of being able to help the community with patient care support and reassurance until an Ambulance paramedic arrives far outweighs any of the challenges," said Ken Ferguson, Putty Brigade.

One NSW RFS CFR crew which has been involved in the program for the past two years has seen the benefits of the program very directly. On two occasions the local CFR team were called to respond to motor vehicle accidents which actually involved CFR members who had suffered significant injuries. One crew member commented: "It was such a relief to know that a medical response, including pain relief, was initiated straight-away. Prior to having a CFR unit, it would have been a 40-60 minute wait for an ambulance response."

The NSW RFS CFR program was initially trialled in August 2007 at Mt Wilson, Blue Mountains District and has since become part of the local community. The program was initiated as a practical solution to providing emergency medical care within a remote community.

Initially, NSW RFS CFR volunteers receive intensive training from Ambulance Service of NSW and then ongoing training once a month with Ambulance Service of NSW trainers at their local NSW RFS brigade stations. This ensured that their life-saving skills were maintained and that medications and equipment are kept up to date.

NSW RFS CFR volunteers now have the opportunity to attend a multi-agency training weekend twice a year. They

are trained and qualified to administer CPR techniques and defibrillation for heart attacks, respond to asthma attacks, diabetic emergencies, anaphylaxis, motor vehicle accidents, broken bones, monitoring of vital signs and to administer specific medications.

CFR training also includes procedures to communicate vital signs and symptoms with paramedics whilst en route and to locate and operate all equipment on the ambulance to assist the paramedics once they arrive.

Recent feedback from other NSW RFS CFR volunteers gives an example of the work and the satisfaction they get from helping their community:

"Many of the calls we receive include a patient from around town, although we may not be well acquainted with them," said Wayne Gluyas, Scotland Island Brigade, "Having that local knowledge helps, especially if you're aware that a patient has a life-threatening illness. On reporting that to NSW Ambulance Control, they can provide us with more specialist advice before the paramedics arrive. The outcome from this can mean that they are still alive today because of the services we provide under the CFR program."

If your brigade is interested in becoming a CFR unit, please contact the NSW RFS Community First Response Coordinator on telephone 02 8741 5501 or email CFRVolunteer@rfs.nsw.gov.au to discuss possible opportunities.



ABOVE LEFT: The briefing at the Community First Responder Multi-agency Xtreme2 Training Exercise in Coffs Harbour. Photo by Alison Moad.
 ABOVE RIGHT: CFR Brigade Members (L-R) Ken Ferguson, Howes Valley Brigade, Ian Feaks, Putty Brigade and Jodie Green from Bulga Brigade, checking equipment in their Ambulance Service of NSW Kit bags for CF responses with their Ambulance Service of NSW Trainer. Photo by Alison Moad

Second wind for Bulky

Cameron Park Rural Fire Brigade in Lake Macquarie (The Lakes Team) recently received a new Category 13 Bulk Water Tanker. But before they could really welcome the new Bulky they needed to farewell the trusty old vehicle that had served them well since 1993. Deputy Captain Peter Sergeant, President David Martin and Firefighter Max Bradford from Cameron Park Brigade tell the tale of two Bulkies.

The new Bulk Water Tanker took over operational duties for the northern part of The Lakes Team from early June 2014, replacing a 35-year-old tanker that has been in service with the brigade since 1993. Far from being retired, the Bulk Water Tanker has recently been acquired by the Hunter Valley Zone and will be operated by Edinglassie Brigade in Muswellbrook.

Cameron Park Captain Mal Bland, Senior Deputy Captain John Davis, Brigade President David Martin and firefighter Jason Kemp delivered the Bulky to her new home with Edinglassie Brigade, 110km away in Muswellbrook on 28 June 2014. David, also one of the brigade's main Bulk Water Tanker drivers, commented that while he was sad to see her leave (and even confessed to contemplating a transfer along with the 'old girl') he was glad to see that she would continue to play a valuable role within the Service: "Hopefully we will cross paths on the fireground somewhere," he said.

Speaking after the handover, Edinglassie Captain Aaron Clerke said: "The Bulk Water Tanker is a welcome addition to our brigade. It will service the Muswellbrook and Denman areas, as well as the rest of the Hunter Valley Zone, or anywhere else it is required."

Far from retirement

The old vehicle, a 1978 International Acco 2152/B 8x4 tanker was originally purchased in 1991 by Lake Macquarie City Council for \$30,000, after it was found for sale in a used truck magazine.

The truck was brought to Lake Macquarie City Council workshops where it underwent some modifications to prepare it for use as Bulk Water Tanker for the local brigades. With a GVM of 24,720kg and a GCM 30,800kg, the turbo charged six-cylinder GM diesel engine was coupled with a reconditioned 14 speed Spicer split gearbox (replacing the original Road Ranger gearbox) to better handle the steeper grades around the district when fully loaded.

Its first outing was the 1993 Lake Macquarie District Field Day, although at that time it was still without a pump. Further modifications included fitting a PTO pump and the installation of additional plumbing to allow the tank to feed or fill from either side (front or back) finalising its transformation into a 22,000 litre Bulk Water Tanker. A new and distinctive paint scheme was applied later in 1993.

Responsibility for the vehicle fell to Reserve Brigade (now

known as Cameron Park Brigade); although its original call sign 'North 5' identified it as a district resource.

The 22,000 litre capacity was contained within four separate tanks, these tanks were later modified in the late 1990s to include baffles to reduce the water surge while driving, to improve handling and increase operational safety. Although the truck was originally setup with a hydraulic PTO pump it was later replaced by a two stage Gaam pump driven by a Hatz diesel engine to improve operational capability.

Cameron Park's new Bulky

In June 2014 Cameron Park Brigade took possession of the brand new Category 13 Bulk Water Tanker. The Single Cab Isuzu FVZ 1400 is one of the first all-white tankers under the new support vehicle classification and is powered by a six-cylinder 24 valve SOHC engine with an Allison six-speed automatic transmission configured with a hand lever operated transmission retarder. Built by manufacturing firm Varley Engineering, it carries 13,000 litres of water, a buoy-wall dam, portable pump, live reel and a crew of three.

Since Cameron Park took delivery of the new Bulk Water Tanker in mid-2014, it has attended approximately eight fire calls and numerous hazard reduction burns, during what has been an otherwise relatively quiet season. The incidents have included truck fires on the M1 Motorway, rubbish fires, a rural structure fire and a couple of bush fires.

While the Bulky has a smaller water capacity than its predecessor, the vehicle is far more maneuverable and according to our drivers, a lot more comfortable. The benefit of having an automatic transmission, reversing camera and air-conditioning, means that it is far less tiring for drivers. The Bulk Water Tanker's pump is optimized for volume water transfers and while there is a small trade off in pressure capabilities, it allows for faster filling from static water supplies and when transferring water between trucks.

Other benefits include ample room for a portable buoy wall dam and other equipment behind the cab and the welcome addition of a hose reel which also provides flexibility and functionality on the fireground.



Edinglassie Brigade members receiving the keys to the Bulky from members of Cameron Park Brigade (L-R) Bill Tindale (Edinglassie Deputy Captain), Aaron Clerke (Edinglassie Captain), David Martin (Cameron Park President), Mal Bland (Cameron Park Captain), James Hayes (Edinglassie), John Davis (Cameron Park Senior Deputy Captain) and Jason Hayes (Edinglassie). Photo by Jason Kemp



Now commissioned to Edinglassie Brigade this Bulk Water Tanker served Cameron Park Brigade well since 1993. Photo by Mal Bland



Among the features of the new Cat 13 Bulk Water Tanker is a hose reel that provides flexibility and functionality on the fireground. Photo by Peter Sergeant



The current build Cat 13 Bulk Water Tanker have an all-white support vehicle paint scheme differentiating them from operational vehicles. Although similar in structure to the new Category 6 tanker, it is without the bull-bar mounted water monitor and shielded crew work area, along with some other minor differences. Photo by Peter Sergeant



The new Bulky has ample room for a portable buoy wall dam and other equipment behind the cab. Photo by Peter Sergeant



The driver's cab has the usual appointments, however note the push button gear selector. The in-dash multi-function display automatically selects the reversing camera view when reverse gear is engaged. Note the hand-operated transmission retarding lever adjacent to the park brake. Photo by Peter Sergeant

75 years Lakesland

“This brigade anniversary is a fine example of a brigade understanding their history and preserving it for future generations. All brigades in the Southern Highlands Team have been encouraged to commence research of their history and to ensure that their future is documented. Many brigades will be celebrating their 100th anniversary in 25 years, we all wish to ensure our past present and future is shared with those who will look back on those 100 years with pride.”

Martin Surrey, Southern Highlands District Manager





Name of Brigade: Lakesland
Year brigade formed: 1940
Current Captain: Blair Briggs
Current President: Ken Anderson
D/T/Z: Wollondilly,
 Southern Highlands

2015 is a big year for Lakesland Brigade as it marks 75 years since the brigade was formed. On 8 January 1940 Police Sergeant McRae, from Picton Police Station, called a meeting that was held at what is now Mowbray Park Farmstay but was then Dr Barnardo's

Training Farm Mowbray Park. A number of local residents attended and the brigade was formed with Mowbray Park Manager, Captain Rees, being appointed as the first Captain.

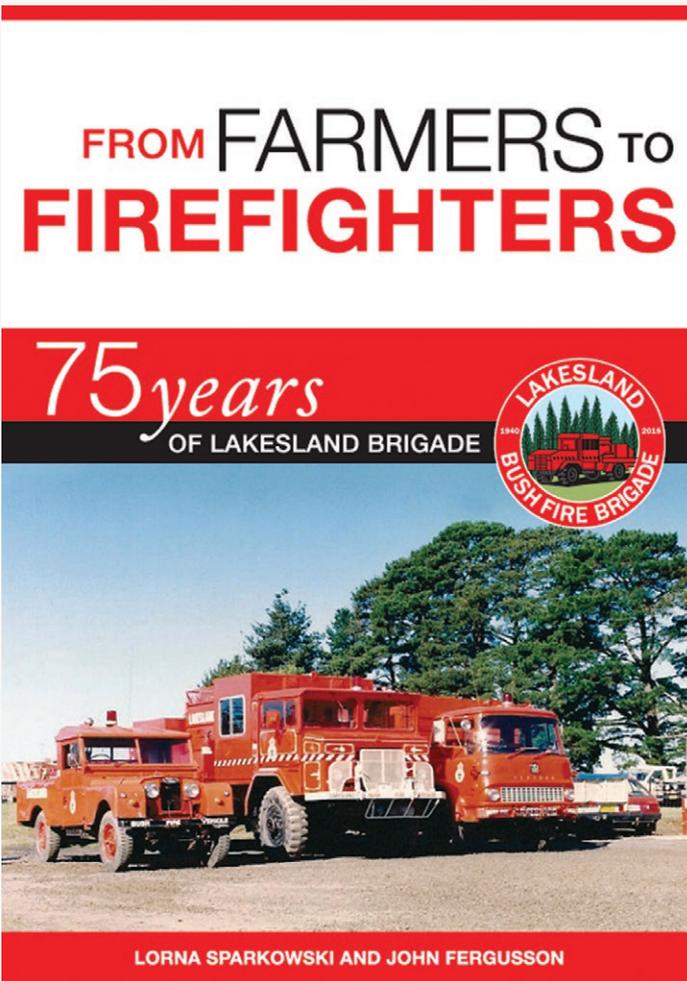
It is serendipitous that 75 years later the brigade's ninth Captain, Blair Briggs, is the current Manager at Mowbray Park. On 8 January 2015, the brigade held its General Meeting at Mowbray Park in (as near as can be confirmed), the same room and at the same time (8pm) as the original meeting. Historic film of fires involving Lakesland Brigade was played during the meeting and met with a great deal of interest.

The brigade has since held a celebration of the formation of the brigade with a gathering at Wooglemai on 17 January 2015 which was attended by

members past and present and their families as well as invited guests who have had significant involvement with the brigade. Member for Wollondilly, Jai Rowell, and Wollondilly Mayor, Col Mitchell, addressed the gathering as did NSW RFS Assistant Commissioner Stuart Midgley. During the ceremony, John Fergusson was presented with his National Medal and Long Service Medals. The brigade awarded John a Life Membership in recognition of more than 60 years of commitment to the brigade. Assistant Commissioner Stuart Midgley presented the brigade with a shield in recognition of its 75 years of commitment to the community.

As with all brigades formed around that time, there was no central body issuing equipment

so members used their own vehicles and equipment until sufficient funds had been raised to purchase equipment. Lakesland's first purchase was some leather beaters in 1941. The leather beaters were only in service for three or four years as they were more likely to spread the fire than to put it out. Knapsacks were a very important tool from the early days with every member having one. A story is told of a delivery in 1962 of six knapsacks that were all designed to be operated left-handed. There was much discussion about what to do with these, including the possibility of dismantling them and engineering them into right-handed units. Eventually it was decided to keep one for a member (John Fergusson) who was left-handed and send the



CLOCKWISE FROM ABOVE LEFT: Brigade secretary, Lorna Sparkowski, and the brigade's longest serving member, John Fergusson wrote the *From Farmers to Firefighters: 75 years of Lakesland Brigade* this year. ABOVE RIGHT: Assistant Commissioner Stuart Midgley presented the brigade with a shield in recognition of its 75 years of commitment to the community. Photo by Natalie Fergusson. BOTTOM RIGHT: The 75th Anniversary celebrations were held in January 2015 at Wooglemai Environmental Centre. Photo by: Lorna Sparkowski. OPPOSITE PAGE: Knapsacks were a very important tool from the early days with every member having one but a delivery of six left-handed knapsacks created some consternation. Photo of a left-handed and a right-handed knapsack by Lorna Sparkowski



ABOVE: Current Captain Blair Briggs. Photo provided by Blair Briggs

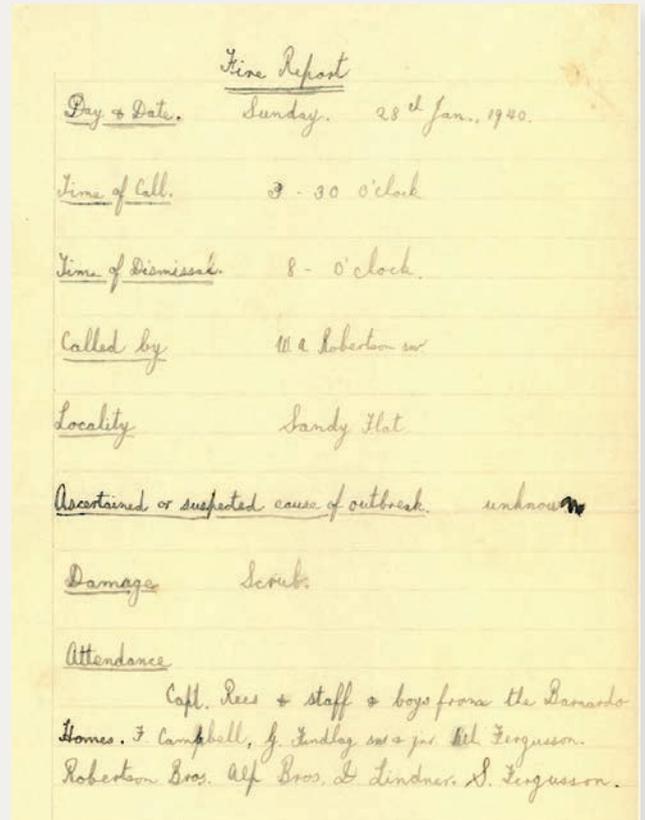
rest back. One of the deputies commented that, as he had been using a right-handed unit for so long, John would have difficulty getting used to the left-handed unit and anyway, with all those knapsacks on the truck how would the crew know which one to leave for John. John commented that the deputy was right on both counts!

This and many more stories have been captured in a book about Lakesland Brigade's history written by brigade secretary, Lorna Sparkowski, and the brigade's longest serving member, John Fergusson. The book *Farmers to Firefighters; 75 years of Lakesland Brigade* was launched at the event by Chair of the State Emergency Management Committee and former NSW RFS Commissioner Phil Koperberg AO AFSM BEM and co-authors Lorna Sparkowski and John Fergusson. The Foreword

to the book was written by Phil Koperberg. The book is a collection of stories about the brigade, its formation and growth over the years and contains many stories of members' recollections. Anyone wishing to purchase a copy should contact the Secretary, Lorna Sparkowski on 4680 9280.

"Lakesland has only a small population but we have such great support from our local community," said Captain Blair Briggs, "our membership has grown consistently and we now have around 70 active members, including two Community Fire Unit teams (Nangarin and Nolans Road) and six Junior members. Without the support of the community we would not have become the cohesive unit we are today."

Written by Lorna Sparkowski,
Brigade Secretary



A Fire Report for what is thought to have been the first fire after the formation of the brigade reads as follows:

Day and date:	Sunday 28 January, 1940
Time of Call:	3.30 o'clock
Time of Dismissal:	8 o'clock
Called by:	W.A. Robertson Snr
Locality:	Sandy Flat
Cause of outbreak:	Unknown
Damage:	Scrub
Attendance: from the	Capt Rees and staff and boys Barnardo Homes, F Campbell, G Findlay Snr and Jnr, A Fergusson, Robertson Bros, Alp Bros, D Lindner, S Fergusson

December 18th 1945

Cottage on fire in Barnardo Home grounds very hot day 100°. All available men on the job. Saved the cottage a long-side. Very good work.

Damage: One cottage completely destroyed with its full contents.

Attendance: Fergusson Bros., V Alp, Bruce Robertson, Boys from Fergusson and many others too numerous to mention. Full gear.

Lakesland Brigade's longest serving member John Fergusson remembers this fire and describes it as follows:

Fire at Barnardos
– Litchfield Cottage

I remember a very hot day when we were digging potatoes. Smoke appeared in the North East – and a lot of it. Athol Fergusson (Captain) took off on the old tractor – a

Silver King pictured below – and headed towards the fire. Dad got the car, a Graham Page, and started to pick up firefighters. I jumped into the car and was told I was too small and was left behind.

Dad told me later that Roly (Ronald) Paxton (Superintendent at Barnardo Homes) gave him a .22 rifle and told him to turn the water tank into a sprinkler.

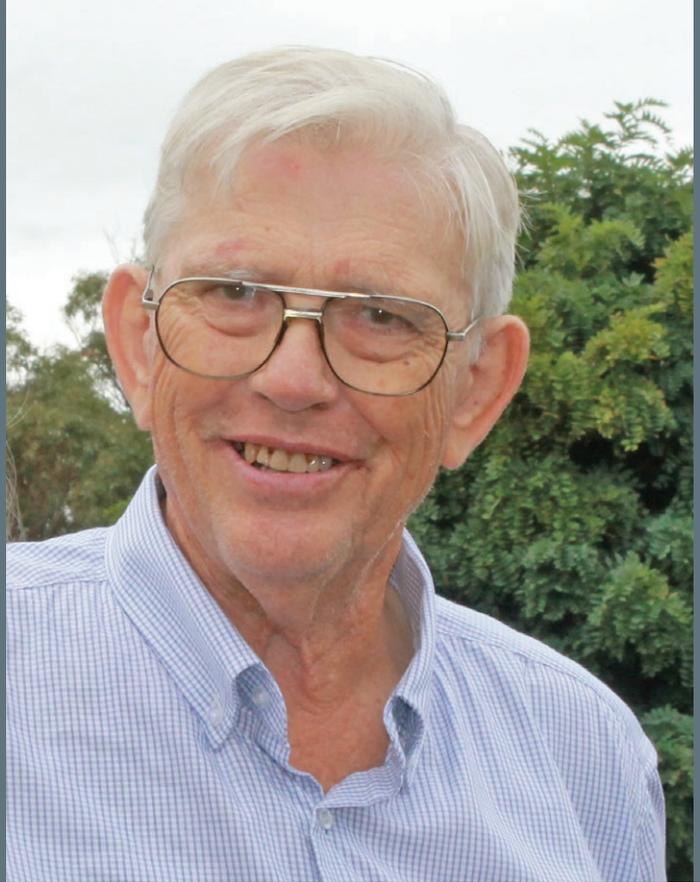
The cottage was totally destroyed, but with no loss of life. The cottage was approximately where the swimming pool is now. At the time of the fire, the cottage was designated as a girl's cottage (before the war), but was not in use at the time of the fire.

VALE: Stanley John Phillips OAM

Brigade: Big Hill Brigade, Southern Tablelands

Died: November 2014

Written by: Captain Wayne Curle, Big Hill Brigade



Unfortunately records don't go back far enough to fully realise the extent of Stan Phillips' contribution to the community of Australia, the volunteers of NSW RFS and similar agencies.

I have been fortunate enough to have known Stan for most of the 20 years that I have lived in the Big Hill district and have seen the passion and dedication that this man of 80 years has held for the protection of the community and the land.

Stan fought his first bush fire at the age of eight. His father noticed a plume of smoke in the distance and, as he was at home alone with Stan on that occasion, thought it best to take him along. They quickly saddled their horses, Stan's father grabbed an axe and a rake and off they galloped at speed. Stan was very excited at the prospect of fighting a bush fire alongside his dad and had never ridden his small pony at such a breakneck pace. They rode up a steep track and Stan called back to his dad saying that his pony was tired and needed a rest. Stan's dad called out: "There will be time for rest once we get there!" So they pushed on.

When they reached the fire it had covered an area of around two acres. Stan's father cut a tree branch and fashioned it into a rake for Stan and quickly showed him how to rake the edge of the fire. Father

said: "Don't worry son, the neighbours will spot the smoke and help will arrive shortly!" But the help never came. Stan and his dad fought the fire alone and after several hours had finally beaten it. Stan sat on the edge of a waterhole at a nearby creek nursing his sore feet, blistered hands and radiant heat burns. He told me: "That was my first encounter with a fire, and I've hated the jolly things ever since!"

That was the beginning of Stan's battle with bush fires. He has fought and helped others fight, countless fires ever since that day. Once Stan even lost his own family home to bush fire while trying to save the homes of others. The 1965 fire devastated much of the local area and was not extinguished until it hit the coast. Stan also lost much of his property, but luckily not the home, in a bad fire in 1979. This fire came through the very week they had finished paying for the damage caused by the 1965 fire.

Stan has filled many roles during his life with the NSW RFS. He was the East Group Captain for many years and represented the region on the NSW Bushfire Council. Stan was the brains behind the concept of convoy firefighting, a technique regularly used today. He was also the man responsible for the woollen balaclava that is issued to all

volunteers as part of their protective clothing. These are just a couple of the innovations brought to the table by Stan. Stan had remained active within the Big Hill Brigade until his illness prevented him doing so. He was still attending our maintenance and training days and was always the first to jump in alongside me when we received a call out.

Stan and his late wife Beryl, worked tirelessly to help protect our community. They did all of this while still managing a working property and raising their two lovely daughters, Grace and Jenny.

Stan Phillips was a very kind and intelligent man who would never mention his contributions, his bravery or his many achievements. He was awarded the OAM, a Medal of the Order of Australia on Australia Day 2006, for his service to the community in particular the NSW RFS - something few people know.

Stan lost his long battle with cancer on Monday 17 November 2014.

Stan Phillips will be remembered by many. For myself, I can say he was the closest thing to a legend that I am ever likely to meet.

ABOVE: Stan Phillips died in November 2014. Photo courtesy of his daughter Jennie Croker

He was the closest thing to a legend that I am ever likely to meet.

AUSTRALIAN COMMUNITY ENGAGEMENT AND FIRE AWARENESS CONFERENCE

Albury Entertainment Centre
19-21 May 2016

The Australian Community Engagement and Fire Awareness (ACEFA) Conference brings together Community Engagement practitioners from emergency services, government and private sectors with the aim of sharing knowledge, experiences and best practice in engaging with our communities to improve community safety. Hosted by the NSW Rural Fire Service every two years, the 2016 ACEFA Conference will be held in Albury for the first time.

Applications to Attend

If you would like to attend the 2016 ACEFA Conference, you will need to lodge an **'Application to Attend'** for approval by your District Manager.

Applications to attend will open in mid-2015. Details on how and where to lodge an application will be posted on MyRFS.

"Came home with a buzzing mind full of ideas to put forth to my brigade and area" 2014 ACEFA delegate

For more information about the 2016 Australian Community Engagement and Fire Awareness Conference, visit the Community Engagement section of MyRFS.

**SAVE THE DATE AND
WATCH THIS SPACE
FOR MORE DETAILS!**

Bush Fire Bulletin Survey

About you

Are you a:

- Volunteer
- Volunteer and staff
- Staff
- Member of the general public

What is your primary location?

- Regional NSW - North
- Regional NSW - South
- Regional NSW - West
- Regional NSW - East
- Sydney

For NSW RFS volunteers:

Are you a:

- Junior member
- Bush Firefighter?
- Officebearer in the Brigade?
- Group Captain?
- Community Safety Officer?
- Other:

How often do you attend NSW RFS events, meetings or training sessions?

- More than once a week
- Once a week
- Once a month
- Several times a year
- Once a year

Communications from the NSW RFS

How do you currently source news about the NSW RFS? (Please select all that apply)

- Your local brigade
- Your local Fire Control Centre
- Bush Fire Bulletin
- MyRFS
- Ebulletin
- NSW RFS Intranet
- Facebook
- The general media

How would you prefer to receive communication about the NSW RFS?

- Email
- Website
- MyRFS
- Social media
- Post

Would you prefer to receive more or less information from the NSW RFS?

- More
- Less
- Same

How do you rate the quality of information from the NSW RFS?

- Excellent
- Good
- Could be improved

Do you consider online communication more effective than printed material?

- Yes
- No

Would you read the Bush Fire Bulletin if it were presented as an online magazine or website?

- Yes
- No

For the Bush Fire Bulletin, what kind of information interests you?

Choose all those that apply.

- Incidents
- Operational Liftouts with 'how to' information
- Messages from the Commissioner
- Good news – successful programs
- Profiles of specific brigades and volunteers
- History
- Awards and Events
- Training information
- Community Engagement tips for volunteers
- Fire Safety messages for the general public
- Information suitable for children
- Innovations and research in firefighting
- Other – please indicate or make suggestions:

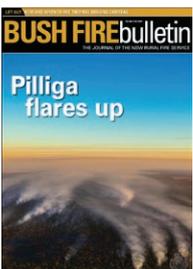
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BUSH FIRE BULLETIN

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Cut out and mail to:

**Bush Fire Bulletin
NSW RURAL FIRE SERVICE**

Reply Paid 67059 Locked Bag 17
Granville NSW 2142
(No stamp required)

or email your details to:

Bush.Fire.Bulletin@rfs.nsw.gov.au

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Cover photo Early morning over the Pilliga State Forest March 2015. Photo by Josh J Smith