LIFT-OUT: THE AIR TANKERS IN OUR SKIES

BUSH FIRE SERVICE

Bursts of activity 2015/16 fire season

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Andrea Coleman

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Foreword

The past few months have seen an extraordinary commitment from our men and women from across NSW. Activity has been both near to home and well as further afield.

In the lead up to the 2015/16 bush fire season, there were predictions of a difficult period ahead, with above normal fire potential across large parts of coastal NSW. It was indeed in these areas that we saw some of the most serious fires, in terms of commitment, including the Hawkesbury and South Coast. These incidents have seen an extraordinary effort by ground crews as well as our aviation resources including the Large and Very Large Air Tankers which have been trialled this past season. You can read about the first year of this trial in this edition of the *Bulletin*.

However the most significant commitment came through interstate deployments, including to Victoria, Western Australia and most recently, Tasmania. Across the season, there have been more than 1,400 of our members deployed to interstate fires. The Service has played a very significant role in coordinating the support for other states from a range of agencies including NSW RFS, National Parks & Wildlife Service, Fire & Rescue NSW, NSW Ambulance, ACT Rural Fire Service and Ambulance Service, South Australian Country Fire Service and Queensland Fire & Emergency Services.

And while there has been an incredible movement of people interstate, it's worth reflecting upon the huge logistical effort involved in moving vehicles, including tankers, personel carriers, trailers and helicopters from NSW through Victoria and across Bass Strait into Tasmania.

As well as the trial of larger aircraft, this past season has given the NSW RFS an opportunity to test a range of new initiatives such as trail bike teams which are designed for use in a range of remote or inaccessible operations. Each bike is equipped with firefighting equipment including Compressed Foam Systems and impulse guns. They are certainly an innovative and progressive addition to our arsenal of fire protection and mitigation technology.

As this season winds up and with the weather on our side, it has been excellent to see crews taking advantage of this and getting some much-needed hazard reduction work done, in some cases this has been the first opportunity they have had to burn for a number of months. Again, I acknowledge the commitment and dedication of our volunteers who work on these controlled burns, often long into the night and spending many hours away from family and loved ones.

While reflecting on the commitment of our people across this past bush fire season, we should also remember Deputy Captain Paul 'Sando' Sanderson, who died while working a on fire near Cessnock last November. Paul's passing was felt right across the organisation, as well as other agencies, with hundreds of people paying tribute to Sando.

Similarly, it was heartening to see the tributes for long time Southern Highlands volunteer Ken Chalker, who lose his battle with cancer on Australia Day. You can read about the #BootsForKen campaign which grew out of volunteer brigades, in this edition of the *Bulletin*.

After a busy, challenging and varied season, thank you to all who have played a role – whether on the front line or behind the scenes.

Regards

Shane Fitzsimmons, AFSM NSW RFS Commissioner

@RFSCommissioner

IN THE NSW RURAL FIRE SERVICE

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

focus

First female Assistant Commissioner appointed



In October 2015 Ms Rebel Talbert (pictured) was appointed to the rank of Assistant Commissioner, making her the first female to hold that rank. Assistant Commissioner Talbert is currently the Director of Operational and Mitigation Services and a long-standing volunteer. She commenced employment with the NSW RFS in 2003 and her current role sees her leading the Service's Rapid Aerial Response Teams program, Remote Area Firefighting Teams and the State Mitigation Support Services. Assistant Commissioner Talbert holds tertiary and post-graduate qualifications in emergency management and public communications. In 2013 she was awarded a Commissioner's Commendation for Service and has been a volunteer firefighter with the Kenthurst Brigade since 2002.

Super Scouts



While the 24th Australian Scouts Jamboree was taking place in 2-14 January 2016, it was the 33rd largest town in NSW! With 10,000 scouts in attendance aged between 11 and 14 and a further 3,000 adults taking care of them, it was the biggest event in the Australian Scouting calendar. NSW RFS was very involved being the only emergency service offering a full-time presence for the duration of the Jamboree. Thanks goes to crews from Illawarra, Cumberland, The Hills and Hornsby/Ku-ring-gai who provided fire protection and emergency assistance. In preparation for the event the NSW RFS prepared emergency planning arrangements and completed extensive hazard reduction works in the area surrounding the Scout Park. The playful spirit among the thousands of teenagers was contagious and NSW RFS members got involved in the fun. Photo by Shane Fitzsimmons

Islamic centre visit



A group of NSW RFS volunteers and staff visited the Islamic Dawah Centre of Australia at Auburn on Emergency Services Day on 20 January 2016. The event was organised so that preschool and primary school aged children could gain a first-hand understanding and appreciation of what the various emergency service agencies do for the community. Also attending were Fire & Rescue NSW, NSW Police Force and Ambulance NSW. Each agency presented a short talk to the children, their parents and teachers with Stephanie Wise, volunteer firefighter from Catherine Field Brigade, (seen here) speaking about the role of the NSW RFS. The children were provided with some basic bush fire and home fire safety tips and the talk concluded with the children practicing the 'get down low and go go o' message by crawling out of the building. Children were able to sit on the new trail bikes that are currently being trialled by the Remote Area Firefighters as well as sit in a Cat 1 truck. Hoses and equipment was on display for the children to handle. Photo by Natalie Sanders

A tornado in Sydney suburbs



Tornadoes are rare in Australia, but on Wednesday 16 December 2015, the Sydney suburb of Kurnell was hit with winds so ferocious they were classified as a tornado. Between 10am and 11am that day, wind gusts of 213kph were recorded at Kurnell. It was the strongest maximum wind gust ever recorded in NSW. A second storm between 1pm and 2pm brought torrential rain and severe winds to Sydney's southern coastal region and eastern suburbs with winds reaching 125kph and over 50mm of rain in 30 minutes. The intense storm and tornado caused great damage through Torres Street, Kurnell and saw many properties without roofs, fallen powerlines and trees blocking roads and driveways. NSW SES responded to around 500 jobs across the state, mainly in Sydney's eastern suburbs. In Kurnell an evacuation centre was quickly established at the Kurnell Rural Fire Brigade Station and was later moved to Cronulla Leagues Club. NSW RFS members were among the first on-scene after the storm, assisting NSW SES with the clean-up over four days providing 24 trucks, including bulkwater carriers and the use of a reconnaissance aircraft. Photo by Ben Shepherd



#BootsforKen grassroots campaign

It is often said that the NSW RFS is like a family. This was demonstrated in January 2016 with the death of Group Captain Ken Chalker, AFSM. A long time volunteer in the Southern Highlands area, Ken lost his battle with cancer on Australia Day. In a very touching tribute, a grassroots social media campaign was established to pay tribute to Ken called #BootsforKen where firefighters were encouraged to post photos of their boots outside their homes and stations. In just a few days, photos were posted from brigades right across NSW, as well as Tasmania, Western Australia and even as far away as New York.



The NSW RFS has more than 5,000 life saving Automated External Defibrillator (AED) units, installed in all vehicles and Fire Control Centres across NSW. Maintaining these units is a massive undertaking but one that saves lives. For example over the past 18 months, 13 units have been used in medical emergencies such as heart failure. The units are serviced every five years and since April 2015, 65 units have been serviced every week. Along with maintenance of the units, 189 members have been trained to service the AEDs and 52,230 batteries have been replaced.

Fires, storms and interstate deployments A summary of the 2015/16 fire season

From 1 July 2015 until early February 2016 members from across all four regions attended over 13,000 incidents ranging from forest fires, to assisting SES with storm damage and several significant interstate deployments.



Hordern Road Fire

Just two weeks after snow blanketed the Blue Mountains, the Hordern Rd Fire in Wentworth Falls started on 31 July. The fire quickly became dangerous fuelled by strong and gusty winds affecting heath vegetation. Homes were threatened on 2 August and a Section 44 was declared. The fire burnt through 600 ha but a massive effort by fire services over seven days kept the damage to a minimum.

Beecroft Peninsula

The town of Currarong on the Beecroft Peninsula in Shoalhaven came under serious threat on 26 November 2015. A fire was burning in inaccessible terrain and a strong southerly change was predicted. The fire was brought to a complete stop 700m from houses in Currarong by the effective use of the VLAT and LAT aircraft. In five sorties, dropping about 130,000 litres of retardant, the Air Tankers created a strong containment line and completely protected the township from any damage.

Hawkesbury

The Terraborra North fire was one of a number of fires that started on 10 December by lightning strikes across the Hawkesbury area. A Section 44 was declared on 11 December and resources were called from a number of surrounding districts. Due to remote and rugged terrain the fire was burning in, night time RAFT operations were used for the first time, along with trail bikes and the tasking of the LAT and VLAT aircraft. The fire burnt more than 5,300ha and took 10 days to contain. See full story on page 14.

Maddens Plain Fire

The Maddens Plain fire burnt 312 ha in bush land between Bulli Tops and Helensburgh and between the Princes Highway and M1 Princes Motorway on 11 December. It closed the major road between Sydney and Wollongong causing considerable disruption. More than 80 firefighters worked throughout the night and the following day to contain the fire.

Tornado in Sydney

Following severe thunderstorms in parts of Sydney on 16 December 2015, NSW RFS crews were among the first on scene for the tornado that hit Kurnell. They initially responded to automatic fire alarms (AFAs) which progressed to reports of building collapse as crews were enroute. The NSW RFS and other emergency services assisted NSW SES with the extensive damage over the ensuing days dispatching Cat 1s, Cat 7s, Bulkwater Carriers and strike teams

Pump Station 9 Fire

In the week before Christmas 2015 a spectacular fire started in tea tree scrub off Medowie Road Williamtown in the Lower Hunter. The fire, close to the RAAF Base/Newcastle Airport, burned 750 ha over four days and threatened a number of rural properties. Firefighters were able to control the blaze and no property was lost. See full story on page 12.

Gold Mine Road Fire

The Gold Mine Road Fire burnt in forested country for 14 days in the Yambulla State Forest, 17km south west of Towamba in Bega Valley Shire from 20 December into the New Year. It was burning in forested country and was adjoining a pine plantation. With extensive use of heavy plant, graders and skidders firefighters were able to protect an adjoining pine plantation.

Victoria and Western Australia

In December and January, the NSW RFS also provided assistance with large and destructive fires burning in Victoria and Western Australia.

Following a request from the Emergency Management Commissioner of Victoria on 28 December 2015 and the Western Australian Department of Fire & Emergency Services Commissioner on 8 January 2016, the NSW RFS



THIS PAGE: The Maddens Plain Fire near Bulli Tops closed the major road between Sydney and Wollongong on 11 December 2015. Photo courtesy of the Illawarra Mercury. BOTTOM RIGHT: Both the Very Large Air Tanker and Large Air Tanker were utillised on the fires in the Pilliga National Park between 13-16 January 2016



ABOVE LEFT: Chainsaw crews assisted the SES in Western Sydney when storms hit on the afternoon of the 14 January 2016. Photo by Paul Best. ABOVE RIGHT: A bush fire burning in difficult to access area at Glen Road near Cooma took off on February 25. Ground crews, with the support of a waterbombing helicopter, contained the blaze within a few hours. Photo by Ailish Germain

coordinated the deployment of 167 personnel with 35 deployments to Victoria and 132 deployments to Western Australia.

Firefighting, incident management and other specialist personnel from NSW RFS assisted with fires in Wye River on the east coast of Victoria and in Yarloop, south of Perth.

The NSW RFS coordinated 12 agencies to assist including Fire & Rescue NSW, National Parks and Wildlife Service, Forest Corporation NSW, Ambulance Service of NSW, ACT Rural Fire Service, ACT Fire & Rescue, South Australian Country Fire Service, South Australian Department of the Environment, Water and Natural Resources, South Australian State Emergency Service and Queensland Fire and Emergency Services.

In addition to personnel, the NSW RFS State Air Desk provided aviation assistance to Victoria with the Large Air Tanker (LAT) deployed. Two medium helicopters were also tasked to Western Australia.

More storms in the Hunter

On 5 January 2016 the Lower Hunter District was hit by another storm event, nine months after the devastating storms of April 2015. Rising waters in the Chichester Dam area and Raymond Terrace caused concern for the safety of residents. Local brigades assisted with sandbagging, fallen trees, leaking roofs and notifying residents of the potential danger. The NSW RFS Lower Hunter Zone assisted the NSW SES at over 50 incidents across the District, both during the event and in the clean up afterwards.

Trio of fires in the Pilliga

Dry storm activity on 13 January caused lightning to start three fires in the Pilliga National Park, 30km north of Coonabarabran, in the Castlereagh Zone. Firefighters tried to gain access to the fireground, however due to the difficult terrain, ground crews were unable to access the fires The LAT and VLAT provided strategic drops on the fire's edge, helping plant and ground crews to successfully establish control lines for containment. The three fires merged into one resulting in a total area of 8,121 ha burnt. The fire was contained on 16 January.

Big Hill Fire

Around 60 NSW RFS units and 180 firefighters worked to contain the Big Hill Fire in Gunning, Upper Lachlan, on 20 January as the blaze ran hard through isolated properties, across the old Hume Highway, spotting 1km ahead over a creek, with no access for ground crews. A predicted wind change caused concerns that the fire would impact the Hume Highway – the main transport artery between Sydney and Melbourne. To combat this, the VLAT, assisted by light aircraft, worked to maintain containment lines. While no properties were damaged, the 375 ha fire claimed around 700 head of sheep – reminding us that losses for rural areas can be dramatic in short periods of time.

Weather – what was forecast and what was

The 2015/16 fire season for NSW began with predictions of worsening conditions and a confirmed El Nino weather event. Above average fire activity was forecast for coastal areas, stretching across much of Victoria, South Australia and Western Australia.

The confirmed El Nino event did bring hotter and drier conditions through spring. Early season heat records were set in October. This combined with below average rainfall across the state resulting in an escalation of fire activity. Fortunately, this was followed by significant rainfall during the first half of November. Most notably, a trough crossing the state on 5-6 November, drawing tropical moisture from Queensland, resulted in some locations in central NSW observing their wettest November day on record.

The second half of November was warm and largely dry, with some short lived high maximum temperature events. This trend continued into the first part of December before a trough brought widespread thunderstorm activity and rainfall to the state. Rainfall for the rest of the December remained patchy, though the northeast continued to experience intermittent thunderstorm activity. A heatwave in the latter part of the month was significant, particularly for southern and western NSW (as well as southeastern Australia more generally).

January was a generally wet and stormy month, with above average rainfall across the state. An East Coast Low between 4 and 6 January brought heavy rain to central parts of the coast leading to localised flash flooding, particularly in the Hunter Valley. Other significant rainfall events occurred between the 14-15, 21-22 and 25 January, effectively taking the sting out of the remainder of the season.

February saw conditions revert to being significantly drier and warmer than average. January rainfall and high relative humidity helping to moderate the impact of these conditions for much of the state.

Despite this El Niño event being ranked in the top three of events ever recorded, spring and summer rainfall was not adversely affected in NSW. This reflects the statistic that not all El Niño events result in drier and warmer conditions.



ABOVE LEFT: More than 130 NSW RFS members assisted in Western Australia in January 2016. Here multi-agency crew gets to work in Murrays Bridge on 13 January. Photo by Jill Brett. ABOVE RIGHT: Three fires in the Pilliga National Park between 13-16 January 2016 required help from the VLAT and LAT aircraft to build containment lines

For example we know that approximately one out three El Niño events receive average rainfall.

Region West

With fewer occasions of extreme fire weather and Districts focused on preparing for early incident detection, Region West had a busy season responding to over 1,300 incidents from 1 July 2015 to early February 2016 – even though few fires reached any large proportions.

Region West volunteers and staff members were deployed to Victoria, Western Australia and Tasmania as part of the NSW contingent dispatched to assist interstate communities.

The Large Air Tanker (LAT) had an identified loading base in Dubbo that was established when the LAT was tasked to a large fire near Coonabarabran. During the incident the air base crew loaded the aircraft a number of times with all reports being very positive.

Region South

From 1 July 2015 until early February 2016, over 2,700 incidents were attended across Region South.

There were a number of occasions with higher fire weather conditions in Region South and quite a few Total Fire Ban days meant that the readiness arrangements for all areas including the MIC desk were activated.

The Beecroft Peninsula Fire south of Currarong in November was the only Section 44 and the VLAT and LAT were used extensively and effectively to put in containment lines and protect the local community.

Another fire of note was the Gold Mine Road Fire that burnt in the Yambulla State Forest down near Bega before Christmas and continued for 14 days involving use of heavy plant.

The Granuaille Mountain Fire burnt close to the NSW/ Victorian border in the Riverina Highlands. RAFT crews were used extensively due to the remote location and flown and in out each day. The VLAT and LAT were also used extensively.

Region South was also kept busy with numerous deployments to ACT, Victoria, Western Australia and Tasmania

Region East

At the commencement of the fire season, Districts were continuing to prepare for the potential hot and dry conditions by attempting to complete a number of hazard reductions as the window slowly closed due to weather conditions.

In December 2015, a Section 44 was declared for the

Hawkesbury District that saw over 500 firefighters and Incident Management Team (IMT) specialists from other areas in the Region being deployed to assist local firefighters with the firefighting efforts over a three week period.

During this time, an unprecedented storm caused damage to the Kurnell area (Sutherland District) and approximately 50 firefighters and IMT specialists were deployed in support of local crews and the NSW SES in the response and recovery phases.

In January 2016, the Region deployed over 50 firefighters and IMT specialists to Western Australia to assist with their firefighting efforts over a two week period. During this time, over 400 firefighters and IMT specialists were deployed to parts of western Sydney in support of the NSW SES to assist with storm and tempest tasks.

In late January 2016 until late February, the Region deployed over 250 firefighters and IMT specialists to Tasmania to assist with their firefighting efforts with the level of support slowly decreasing as the Tasmanians moved into the recovery phase.

In February Districts prioritised hazard reduction works as the window of opportunity again opened with favourable weather conditions.

Region North

Region North had a relatively quiet season in comparison to previous years, however Districts still responded to over 2,700 incidents across the region from 1 July 2015 to early February 2016.

The Old Number 1 Break Fire in the Warrumbungle area was reportedly caused by lightning and although it was quickly contained compared to many Pilliga fires it did take work for 12 days to final move it to out after consuming over 8,000 ha of National Parks and a small portion of private property. The use of aircraft including the VLAT and LAT were effective in assisting to combat the fire.

Region North deployed over 96 personnel interstate and overseas contributing primarily Incident Management Team personnel into Western Australia and Victoria. Both firefighters and IMT travelled to Tasmania in January and February and continued to provide assistance as required. Two staff members assisted in Canada early in the fire season, with a further two senior volunteers from Region North providing assistance to the United States.

Despite the quiet start to the season, in February Region North, Districts saw an increase in fire activity and response due to rising temperatures and fuel loads drying out.

Arduous, remote and rewarding NSW RFS shows its commitment to Tasmania



The work was arduous, dirty and physically demanding but a total of 840 NSW RFS members put up their hands to help out in the fire effort in Tasmania between 22 January and mid-March. It proved to be the largest ever interstate deployment of remote area firefighters and included quite a few logistical challenges.

In early January 2016 Tasmanian fire authorities were dealing with significant levels of fire activity with around 300 fires burning in remote and inaccessible areas around the state. Due to the ongoing levels of fatigue of Tasmanian personnel and the high levels of activity, requests were formally made for assistance in late January.

Over six weeks, from 22 January 2016 to 12 March, NSW RFS coordinated 1,340 deployments to assist our colleagues in Tasmania. Almost three-quarters of these deployments were crewed by members of NSW RFS. The agencies involved were NSW RFS, National Parks and Wildlife Service, NSW Ambulance, ACT RFS and Ambulance Service, Fire & Rescue NSW, Forestry Corporation, South Australia Country Fire Service and the Queensland Fire & Emergency Service.

Personnel fulfilled a wide range of roles including the deployment of entire IMT's, Fire Behavious Specialists, Base Camp Personnel, Liaison Officers and aviation specialists. In particular NSW RFS deployed a large number of Remote Area Firefighting Team (RAFT) members who could work from helicopters, be self-sufficient and, as necessary, work overnight. It was the largest ever interstate deployment of RAFT.

In many cases these remote area firefighters were working

to save pristine rainforests in Tasmania's World Heritagelisted wilderness such as Cradle Mountain and Lake Peder. The firefighting involved was extremely demanding often occurring in very remote, if extremely beautiful, locations. Despite the arduous nature of the work, 40 RAFT members returned for a second deployment!

Almost daily throughout January and February and March, crews were moving through airports in Sydney and other centres, flying in or out of Tasmania for five or seven day deployments.

By the second week of February, NSW RFS has already deployed 500 firefighters and deployments were expected to last until at least the end of March. At this time a new capability was established to ensure Tasmania's requirement for personnel could be met. This was named the Tasmania Arduous Firefighter capability.

Tasmania fire authorities had already identified the need for firefighters who could work in arduous conditions. This would involve working in isolated areas conducting dry firefighting, control line construction and walking moderate distances to access fires, but did not involve helicopter winching or hover entry and exit. A Expression of Interest process was established for the Tasmanian Arduous Firefighter capability and 228 applications were







TOP: February Plains in the Cradle Mountain National Park. Photo by Michael James. ABOVE LEFT: Lake Makenzie Fire (L-R) David Ogle (Hornsby RAFT), Paul Burke (ACT RFS), Steven Norrie (ACT RFS), Michael James (Lake George RAFT), Steven Graham (Lake George RAFT). Photo by Michael James. ABOVE RIGHT: Lake Bill Fire: a true multi-agency response! (L-R) Steven Norrie (ACT RFS), "Roy" (Tas Fire), David Ogle (NSW RFS). Photo by Michael James James (Lake James).

received. Three deployments of the Arduous Firefighters took place between 28 February and 4 March involving 72 firefighters before rain set in on the firegrounds.

Logistical challenges

Moving hundreds of firefighters and trucks interstate is hard enough – but even more difficult when it's more than 1,000 kilometres away on an island. So the logistical challenge was great.

Fifty-four vehicles and four trailers were deployed, driven to Victoria by volunteers before being placed on the *Spirit of Tasmania* ferry for the trip across Bass Strait. The vehicle breakdown is as follows:

- Five Cat 1 appliances from Region East
- Five Cat 9 appliances from Region East
- Two strike team leader vehicles from Region East
- Five Cat 1 appliances from Region South
- Five Cat 9 appliances from Region South
- Two strike team leader vehicles from Region South
- 19 personnel vehicles from Region East;
- Nine personnel vehicles from Region South; and

 Two support vehicles from Operational and Mitigation Services.

NSW RFS drivers flew to Melbourne in mid-March to return these vehicles to their respective locations.

Four NSW RFS winch-capable helicopters, including two NSW RFS helicopters, were also flown south along with the a reconnaissance aircraft and a crew of air support including an Air Attack Supervisor, Aircraft Officer, Air Operations Manager and Air Observer.

Additionally, a NSW RFS base camp able to house 150 personnel was established at Mole Creek. The Base Camp request came from the Tasmanian Fire Service on 11 February and by 16 February the Base Camp was fully operational, hosting interstate deployments in 16 large tents, five ablution blocks, a mess and a catering function.

Additionally, to support local fire managers with Fire Behaviour Analysis, two Portable Automatic Weather Stations (PAWS) were deployed to Tasmania.

Demobilisation of NSW RFS resources occurred in early to mid-March.





ABOVE: Just some of the NSW RFS fleet sent to Tasmania. Here, 6 March, the vehicles are being prepared to return to the mainland and then overland to NSW. Photo by Lance Toovey

Trouble in the treat treat treat trees

In the week before Christmas 2015 a spectacular fire in tea tree scrub burned for four days, north of Newcastle. Close to the RAAF Base and Newcastle Airport, the fire burned 750ha and threatened some rural properties, however, firefighters were able to control the blaze and no property was lost.

Friday 18 December 2015

The Pump Station 9 Fire broke out around 1300hrs off Medowie Road, Williamtown. Four NSW RFS trucks were immediately sent to the scene, the Rapid Aerial Response Team (RART) based at Cessnock Airport and one waterbombing helicopter were also dispatched.

While no property was under threat, the fire was generating a lot of smoke. Throughout the day Medowie Road was closed between Nelson Bay Road and Richardson Road.

Fire crews worked quickly to establish perimeters around the fire. By late in the afternoon, NSW RFS resources included over 100 firefighters, 12 trucks and the RART team. The RART crews worked on a spot fire to the west of the main fire while the helicopter started water bombing. Due to the tea tree vegetation, the fire flared and spotted at times. A backburn was put in along Medowie Road in front of the nearby Williamtown RAAF Base.

As night fell and conditions cooled, the intensity of the fire eased and backburning operations continued through the night.

Saturday 19 December

Crews completed the Medowie Road back burning operation overnight. Heavy plant was brought in to allow access to some swampy areas, in order to strengthen containment lines.

The fire spotted to the west of Medowie Road and burnt to the north of the RAAF base, doubling in size.

Overnight NSW RFS, RAAF and FRNSW crews worked together to implement a back burn in the unburnt area around the RAAF ordinance dump.

Sunday 20 December

The fire had increased to 350ha due to the spotovers and the continuation of burning. Fire creeping into the previous burn area to the east remained problematic.

Overnight crews were mopping up with increased vigour, blacking out and patrolling the perimeters. Weather conditions eased overnight allowing crews to complete and strengthen containment lines.

At 1100hrs a wind change caused the fire to break containment lines, travelling south across a grass paddock toward Nelson Bay Road. The fire was now causing concern for some rural properties along Nelson Bay Road and the Banksia Grove Retirement Village. Two strike teams from Lake Macquarie / Wyong were dispatched to provide property protection to this area. If the fire was to make a run to the north, rural properties along Richardson Road could be at risk. Due to the increased risk to property, the Alert Level was lifted.

Fire crews along with five waterbombing helicopters and a fixed-wing water bomber worked hard to slow the progress of the fire. Variable winds and fuels in this area created some difficulty for firefighters.

In the early afternoon, as temperatures soared above 37 degrees, a Watch and Act alert was issued for residents in Nelson Bay Road, between Medowie and Richardson Roads. Conditions had eased by 1520hrs and the alert was decreased.

Nelson Bay Road was closed between Richardson Road and Cabbage Tree Road, although Police were allowing travellers through to Newcastle Airport. Medowie Road was also closed due to smoke.

Crews worked through the night to strengthen containment lines and mop up and black out ahead of the predicted weather conditions for the following day.

Monday 21 December 2015

Fire activity significantly decreased throughout the day. Crews spent the day patrolling and dealing with hot spots to ensure the fire remained within containment lines.

The crews patrolling behind properties on the north side of Nelson Bay Road required air support to assist with hot spots. The Fire Boss aircraft assisted as all other air support had been relocated to another fire within the district.

By late afternoon the fire was declared contained although crews continued to patrol the burned area overnight.

While contingency plans were in place for the oncoming southerly expected at around 1500hrs, containment lines held. The fire was now estimated to have burned 750ha.

Overnight crews were stood down as rain began to fall on the fireground. Over 30mm of rain fell throughout the night.

Tuesday 22 December 2015

Around midday, with rain falling across the fireground, the fire was declared out.



TOP AND BELOW: Sunday 20 December 2015: Medowie Brigade members prepare to fight the fire on Medowie Road in temperatures around 37 degrees. OPPOSITE PAGE: One of five waterbombing helicopters which helped contain the volatile blaze on Sunday 20 December. Photos by Wes Whitworth



I WAS There

Date: 20 December 2015 Time: 3pm Location: Medowie Rd, Williamtown Photographer: Wes Whitworth

"Paterson 1 is the truck in this photo and it was undertaking suppression activities to the flank of the fire. Within a few minutes, the flank of the fire became the head of the fire due to numerous microbursts and variable wind conditions. The fire flared toward the crew through the low lying tea tree scrub and eucalyptus trees on the edge of Medowie Road, thus creating the crowning activity seen in the image. Three NSW RFS members are on the left hand side of the road attacking two aggressive spot fires. You can see them shielding themselves from the radiant heat from the crowning fire.

It was not long after taking this photo that I removed myself from the area due to the unpredictable nature of the fire front and the wind conditions. I have been a firefighter with NSW RFS for 15 years on and off now, and I've not seen many times where the 'perfect storm' of high temperatures, low humidity and the tea tree and eucalyptus oils have come together to create a flash over quite like this.



Trials and tribulations

The Terraborra North Fire proved testing in more ways than one

In early December a fire took off in rugged terrain in the Hawkesbury area, eventually burning 5,300ha. The size of the fire was a challenge. It took crews more than one and a half hours to travel from the most western to eastern points of the fireground. Over 10 days of resource-intensive effort, the fire saw the implementation of a number of initiatives, and successfully saw no loss of life or property. Chris Garlick was one of the Public Liaison Officers for this fire and reports on some of the unique features of the Terraborra North fire.

9-10 December 2015

Late on the afternoon on 9 December 2015 storm fronts moved across the Hawkesbury District producing a series of dry lightning strikes. The following day two fires, Budda Creek and Terraborra North, were detected by spotter aircraft within the Parr State Conservation Area, approximately 10km north of Colo Heights. Aircraft and ground crews were dispatched to investigate the Budda Creek fireground but ground crews



ABOVE: The Budda Creek fire burning uncontained on 11 December. The fire travelled 8km under very high fire danger conditions. Photo by Kevin Drake. OPPOSITE PAGE: 16 December 2015: Ground crews undertook extensive backburning to establish containment lines. Photo by Tim Mulford, Grose Wold Brigade were unable to access the fireground prior to nightfall. Some waterbombing was able to be implemented.

11 December

Predictions were for hot and windy weather in the afternoon and fire managers were concerned about the potential for the fires to burn out of control.

Early in the day aerial surveillance of the fires was conducted to ascertain the effectiveness of the previous evening's water-bombing operations. Remote Area Firefighters Teams (RAFT) from both NSW RFS and National Parks and Wildlife Service, were inserted with the intent to establish containment lines around the fires.

As the afternoon progressed, hot and windy weather did eventuate and both the fires were spreading quickly. RAFT were immediately extracted from the fireground and back at Hawkesbury Fire Control Centre, an Incident Management Team was formed and a Section 44 declaration was made at 1700hrs.

Through the day the Large and Very Large Air Tankers were deployed to slow the progress of the fires by building massive containment lines.

A merger

Both the Budda Creek and Terraborra North fires were relatively large and located quite close together, so it was deemed more effective to treat the fires as one fire using a broad containment strategy. This was the birth of the Terraborra North fire. Over the next 10 days, a significant number of resources were used to bring this fire under control. It was also an opportunity for the NSW RFS to trial a number of initiatives including overnight RAFT operations, the LAT and VLAT aircraft and the use of trail bikes and to provide excellent training to crew leaders.

Sheer size

To put this fire into perspective, the fire burnt 5,338 hectares (the equivalent of 7,850 football fields) with a perimeter of 166km (the equivalent of driving by road from Windsor to Marulan). The fire burnt in very rugged and hilly terrain, it took crews more than one and a half hours to travel from the most western to eastern points of the fireground – often requiring a high level of skill and concentration from appliance drivers.

The affects of smoke from the fire could be felt by a number of areas as far as the Central Coast, Blue Mountains and Northern Beaches for several days.

Brute force

The credit for containment of this fire should be given to the volunteers and staff of the NSW RFS and National Parks and Wildlife Service. Those on the front line worked to provide vital intelligence, implement backburning operations and protect established containment lines. It was a significant effort involving volunteers and staff from across the State, with a number of out-of-area deployments occurring to support local resources. The fireground was monitored 24 hours a day until



ABOVE: 15 December 2015: More than 10 aircraft worked on the Terraborra North Fire keeping a bird's eye view on the backburning operations. Photo by Rolf Poole

Firefighters were assisted by a range of support groups, such as heavy plant, RAFT, Catering Groups, Communications Groups, NSW State Emergency Service, NSW Police and NSW Ambulance containment was reached, with more than 150 firefighters and support personnel per day. At the time of containment, more than 1,500 firefighters had been on the fireground committing more than 18,000 crew hours to the fire effort.

The support act

Firefighters were assisted by a range of support groups, such as heavy plant, RAFT, Catering Groups, Communications Groups, NSW State Emergency Service, NSW Police and NSW Ambulance (Special Operations Team). A fully self-sufficient staging area was also set up to provide refreshments, supplies and equipment as crews rotated through the fireground. To support the large amount of aircraft working on the fire, two air bases were set up to accommodate aircraft and associated infrastructure.

Trail bike trial

Two-person trail bike teams are being trialled within NSW this fire season and the Terraborra North Fire gave managers an opportunity to gauge the effectiveness of this new firefighting resource. The trail bikes teams were predominantly involved in gathering operational intelligence such as assessing the condition of various trails and paths around the fireground, monitoring containment lines, identifying any problem trees and as a rapid response to small spot fires.

The trail bikes also assisted in the set up specialist equipment around the fireground, including the Portable Automatic Weather Station (PAWS), which gave the Incident Management Team accurate weather readings from the fireground.

Overnight RAFT operations

This was the first time that NSW RFS had used RAFT crews who camped on the fire line overnight. After a strict risk assessment, two Remote Aerial Firefighting Teams were flown to the fireground and inserted on pre-established helipads at the commencement of their shift. The crew worked on backburning operations and felling problem trees before establishing camp to patrol and monitor the containment lines overnight. The teams spent the night camped on the fire line. At the conclusion of their shift, overnight teams were collected from pre-established helipads and the relieving shift commenced.

Air force

At the height of the operation, 12 aircraft – including Air Cranes, Large and Very Large Air Tankers – worked on a number of aspects of this fire. Their roles included supporting ground crews through waterbombing operations, winching and support operations for RAFT personnel, aerial surveillance and aerial incendiary.

The LAT and VLAT worked on this fire for more than a day. Initially, their primary task was to slow the progress of the fire as it burnt under hot and windy conditions.

Both aircraft worked to construct a containment line of retardant totaling 14km long, dropping more than 1 million litres of suppressants – an Australian firefighting record.

Despite light rain disrupting the retardant line a few days later, the strategy proved to be successful with ground crews able to conduct backburning operations from the line.

Telling the story

Keeping the community informed, particularly those who were isolated, was a critical part of the operation. Community meetings were held at Colo Heights and St Albans and were well received. Given the number of isolated properties affected by the fire, information was supplied on a daily basis to brigades who would then distribute it to their local communities through their established networks.

As the potential for the fire to threaten communities eased, the public liaison team focused on raising awareness of the fire through online, print and social media to highlight the importance of the volunteer workforce. This also helped to reduce the number of emergency calls being made regarding smoke sightings.

By providing accurate, up-todate information through social media, including photos from the fireground, engagement with the Hawkesbury District increased accordingly with more than 9,000 Facebook users seeing content posted each day.

Hawkesbury District's following on Facebook increased from 3,793 to 4,143 over the period of the Terraborra North Fire and close to 137,000 users visited Hawkesbury District's Facebook page or saw posts by the page in their news feed.

Training ground

Due to the length, diversity and complex nature of the Terraborra North Fire operation, a number of staff and volunteers were able to gain valuable experience and accreditation in a number of qualifications.

The Group Officer Mentoring Program, an initiative of Hawkesbury District, was effectively combined with the real-time management of the fire. Senior brigade officers who are working towards Group Leader qualifications, were able to fill the functions of the Group Officer's role while working alongside qualified Group Leaders. The implementation of this program on this operation allowed candidates to apply their training in a realistic operational environment while being able to draw on the knowledge, skills and experience of existing Group Officers.

In another sphere of activity, out-of-area chainsaw crews were also able to achieve recertification. Over a threeday period chainsaw crews from several Districts were brought in to deal with fallen and problem trees on the fireground. This enabled some chainsaw operators to be recertified and freed up other firefighters up to deal with the fire front.

The end game

After an aggressive aerial ignition campaign to finalise containment, a southerly change swept across the fireground bringing cooler temperatures with consistent, lasting rain. After NSW RFS handed the management of the fire back to NSW National Parks and Wildlife, the fire was eventually declared out on December 27. It was 17 days after initial ignition.

As a result of the dedication of those working on this fire, protection was afforded to a number of communities including Upper, Central and Lower MacDonald, St Albans, Colo Heights and Webbs Creek. The burnt area of this fire will now also serve as a potential containment strategy for any future fires in the area.



TOP LEFT: High fuel loads and favorable temperatures allowed for backburning operations to continue successfully throughout the night. Photo by Fil Mincev. TOP RIGHT: 19 December 2015: A Hunter Valley chainsaw team working to remove dangerous trees. Photo by Robert Day. ABOVE LEFT: Part of the 9.5km containment line constructed by *Thor* and *Southern Belle*. ABOVE RIGHT: Trail bike teams were tested on the Terraborra North Fire assisting with reconnaissance and setting up portable weather stations on the fireground. Photo by Simon Topp

DAZE

NSW RFS

Two person trail bikes teams were on trial across NSW this fire season

Western

The new trail bike teams are designed to be deployed to a range of incidents including fires in remote areas or with difficult access, assisting other fire appliances at small fires, vehicle fires, non-vegetation fires and offering some containment and intelligence on larger fires.

Sixteen volunteer firefighters with qualifications in remote area operations took part in the trial across eight districts which included both urban interface and regional areas. Those involved in the trial were Blue Mountains, Hawkesbury, Lithgow, Southern Highlands, Cudgegong, Far South Coast, Monaro and Lake George. The volunteers selected for the trial had experience in off-road riding, undertook an off- road riding course and were all current Remote Area Operators.

"The experienced riders involved in the trial have been invaluable," said Assistant Commissioner Rebel Talbert, "Their knowledge of both firefighting in remote areas and trail bike riding has helped us develop and fine tune this incredibly versatile new addition to the NSW RFS firefighting arsenal."

NSW RFS has the capability of four trail bikes. A team consists of two riders, each on a bike and each team is provided with a transport trailer and a 4WD.

Equipment and specifications

The trail bikes can carry a range of firefighting equipment including Class A Compressed Air Foam Systems (CAFS), IFEX 3000 Impulse Guns, McLeod tools and a chainsaw kit. Riders maintain communications with FIRECOM or field commanders at all times via radio through bluetooth headsets worn under the helmet.

"The variety of equipment means the trial bike team can be used for a range of purposes. In addition to rapid response, the bike teams can also be used for initial intelligence gathering, reconnaissance and patrol work," Ms Talbert said.

Activation

Over the trial period in the 2015/16 fire season the trail bikes were allocated to a district for up to two weeks, at a time based on weather

forecasts. On certain days of elevated fire risk, the trail bike teams were on standby for instant response. On these occasions the trail bike teams stood by at the Fire Control Centre, brigade stations and other suitable locations to be dispatched over the radio upon the first report of a fire. On other occasions the trail bikes will be called out when required.

Dispatch of the trail bikes is by the district duty officer from a location agreed to at a local level. During dispatch, the district provides the bike Crew Leader with a briefing including sufficient information to ensure situational awareness and safety.

In December 2015 the trail bike teams were allocated to the Hawkesbury district for assistance at the Terraborra North Fire over two days. The versatility of the trail bikes and riders enabled the Incident Management Team to use them on a variety of tasks including checking control lines, removing fallen trees, analysing fuel moisture and even establishing a remote Portable Automated Weather Station.

On the morning of the 14 January 2016 the trail bikes were dispatched by Monaro Fire Control Centre staff . Probably ignited by a lightning strike, the Bold Slate Fire was located in a remote area and was about one hectare in size. A Rapid Aerial Response Team was deployed to undertake direct attack, while the trail bikes were able to climb in very rocky and densely vegetated terrain to reach the fire. The two teams got to work with chainsaws and rake hoes to ensure containment. By the afternoon, a bulldozer had provided access for ground crews and the trail bike team was able to handover to the local brigade.

"The feedback from riders, volunteers and staff has been extremely positive so far," Assistant Commissioner Rebel Talbert, "We will continue the trial in the 2016/17 fire season and are currently assessing options of including other areas across the state."

For more information please contact Remote Area Firefighting & Specialised Operations at raft@rfs.nsw.gov.au







TOP: The Trail Bikes can carry a range of firefighting equipment including Class A Compressed Air Foam Systems (CAFS), IFEX 3000 Impulse Guns, McLeod tools and a chainsaw kit. Photo by Ben Shepherd. MIDDLE: In January 2016 a trail bikes team was dispatched to a fire in the Monaro District. The bikes were able to climb in very rocky and densely vegetated terrain ahead of other ground based crews. Photo by Marten Sweeney. ABOVE: Trail bike teams can be equipped with Impulse Guns used to suppress small fires quickly. Photo by Ben Shepherd. OPPOSITE PAGE: Photo by Ben Shepherd

Suffering from the **bear Scares** Australians deployed to 2015 Canadian fires



ABOVE LEFT (L-R) Abundio Bustos Santana, Jillian Guest and Jorge Camacho (aka George, aka Macho Camacho). AVOBE CENTRE: "This was HFS36, they were my chainsaw crew," Jillian said, "On the far left is Travis, the crew leader, he has 26 years experience. The big guy over my left shoulder was called 'Mouse'. He was a very funny young guy, always joking and singing." ABOVE RIGHT: Jillian with Rebecca the only Mexican female firefighter in her crew. OPPOSITE PAGE: Jillian with her crew on the way to the fireground. Due to severe terrain crews were flown in and out by helicopter every day

Forest fire season in Canada typically runs from April through to October. Between January and July 2015, over 5,041 fires had been recorded and three million hectares burnt. It was well above the ten year average recorded in Canada. Every province in Canada experienced active fires and were subject to extreme weather conditions, including record high temperatures and very low relative humidity. In early July a formal request was received from Canadian authorities for Australian assistance. Emergency Management Victoria oversaw planning arrangements and NSW RFS coordinated the response from NSW. A deployment of 104 Australian firefighters and specialists travelled to Canada for a period of around six weeks with 33 volunteer and staff coming from NSW. The NSW RFS members were predominantly deployed to British Columbia, Alberta and the North West Territories in a variety of different roles including firefighter, incident management, aviation, fire behaviour analysis and field command and liaison, for approximately five weeks.

The NSW RFS personnel sent to Canada come from all over the state and were selected from the 2015 Overseas Deployment Register. Jillian Guest, Learning and Development Officer in the North West Zone was one of those NSW RFS members deployed. Here she explains what it was like to fight fires amongst the heavy duff layers, the warm welcome of international firefighters and the 'bear scares'.



Due to the terrain, vehicle access to the fireground was not possible and we were required to be flown in and out by helicopter every day.

This was my second deployment to Canada.

From experience, when you are asked to deploy, it is generally for an unknown amount of time, although indications were that it would most likely be for five weeks. Both times, our deployment was cut short as the weather generally eased and the local crews we adequately rested and able to take over again.

In 2014 I deployed to British Columbia Friday August 8 and arrived home Monday September 8. I was the only female from NSW RFS and I think one of only two females from all of NSW (the other was another Jill, from NPWS).

I was a single resource which meant I was mixed in with Canadian Incident Management Teams (IMTs) and moved to different fires as required. I carried out the role of Branch Director (essentially sits between Division and Operations) near Vanderhoof overseeing approximately 100 personnel, managing a base camp and a small IMT. I also was a Divisional Supervisor (Div Sup) at a fire near Chetwynd.

2015

This time I was gone for three weeks. I departed Australia on Monday 13 July and arrived home Sunday 2 August. I was attached to a mostly Australian IMT and worked from a fire camp not far out of High Level, in the North of Alberta.

My role as Strike Team Leader was to supervise a sector of the fire's edge spanning approximately 1.5 kilometres and oversee the work of up to 30 firefighters. We were working in swamp land (muskeg) which was hard to navigate, let alone work in.

Due to the terrain, vehicle access to the fireground was not possible and we were required to be flown in and out by helicopter every day. This was a major logistical feat, which didn't always go to plan, but our crews remained in good spirits, entertaining themselves with songs, games or stories while we waited and some would even take the opportunity for a short nap.

My crew generally consisted of 20 Mexican firefighters (one English speaking) and two chainsaw units (four people from Ontario and four First Nations Albertans).

I split the crew into two teams and worked them in opposite directions from our helipad. It was all hand-tool work, cutting trails with chainsaws, setting up portable pumps (either pumping from a dam, the river or digging holes down to access the water), running out long lines of hose, breaking up logs with polaskis and blacking out with wajax (knapsacks). We also worked with 'bucket ships' (helicopters with water buckets) calling them in to assist with flare-up as required.

The duff layer was so deep that firefighters needed to spend several hours digging out and soaking each hot spot. I even witnessed one crew slicing through the duff layer with a chainsaw, like slicing of a piece of cake with a knife!

Days were long, generally 12-14 hour days on the fireline.

Although I am familiar with being in a leadership role, I found it difficult to stay hands-off. I was referred to as a 'white hat' (because Strike Team Leaders wear white helmets, crews wear red or blue) and it was not common for a white hat to do any physical work. Anytime I would try to pick up a hose or help carry out equipment I was quickly ushered away, out of respect for my position. I found myself having to help out on the sly, moving equipment when no one was looking.

The biggest danger on the fireline (aside from bears) was that of falling trees. There were a lot of storms during the shift and I would often need to pull crews out as storm approached and send them back in once the storms had passed and wind died down.

The highlight of the deployment was the people. They were all so great!

One of my Ontario crews was tasked to a different sector on my last day on the fire. In the afternoon, they found me in the mess hall and they complained that they were "the only crew who didn't have an Aussie for the day!" They also advised me that they planned on marrying me so I didn't have to leave. This was one of the few crews who had a female firefighter, Nicole; she was fantastic and had a great positive, hardworking attitude.

I also had the only Mexican crew with a female firefighter, Rebecca who was so quiet and studious and who blended in so well that I often forgot she was there! I only wished I was able to speak Spanish so I could have had conversations with her to learn more about her life.

The base camps were very well resourced. There were large trailers containing bathrooms, kitchens, mess halls, a laundry, medic and separate trailers for the various functional areas of the IMT. There was a drying tent, a communications tent full of international capable phones for the Mexican crews and even a fuel bowser.

Although it didn't look it, the tents were quite comfortable. Some people struggled to sleep, not because of the accommodation but because the sun would only set for approximately four hours a day. I had no issue with sleep. I was spending my days walking almost non-stop, so would tend to be asleep before my head hit the pillow. I did have one nervous night of thinking about a bear finding my tent and getting curious about what was inside (known locally as having the 'bear scares').

Keeping in touch with home was tricky. There was WIFI access at the IMT section of the camp, which was up hill from where we slept, and although a quick walk would get you there, some nights you opted for that extra 30 minutes sleep instead.

The trip home was a long one: two buses, three planes and a two hour drive. It was a total of 36 hours from departure in Edmonton Alberta to driving up the driveway in Coonamble.

I'd also like to thank a few people: To my husband for being supportive; to the North West Zone staff for covering for me in my absence; to the RFS HQ staff who looked after all of the behind-the-scenes logistical and other arrangements; to my colleagues from Australia who deployed with me, and to our friends across the seas: The Canadians for being so welcoming and accommodating and to the Mexicans for being patient and respectful.



ABOVE: The Thunderbirds Unit Crew (similar to the NSW RFS RAFT crews) heading off for the day from the Cougar Creek Camp in British Columbia. "These units work extremely hard," said Laurence McCoy who was deployed Canada as a Fire Behaviour Analyst, "They are tough like mountain goats building hand tool lines and lugging hoses on the side of hills." Photo by Wayne Rigg (CFA)



ABOVE: A photo of one of the accommodation options at the Cougar Creek Base Camp (Boston Bar – British Columbia). The camp was very well equipped. Demountable buildings were set up for catering, showers and toilets as well as the offices for the IMT. Photo by Laurence McCoy

On the ground in Alberta

Deployed to Canada as an Incident Controller, Kam Baker shares his experience at Alberta's Larne camp.

In all of the 36 years Kam has been with the NSW RFS, he describes his deployment to Canada as: "The best thing I've ever done".

While British Columbia has a history of requesting overseas assistance during increased fire activity, 2015 saw the first international deployment to Alberta, due to the largest fires experienced in around 40 years.

Within hours of arriving in Canada, an Australian unit of 46 were on their way to the top north-west corner of Alberta to the Larne camp – a large IMT and camp set up in a quarry, with fires accessible only by aircraft. The Larne camp housed more than 200 Canadian, Mexican and Australian firefighters who were tasked to the surrounding four wildfires, the biggest being over 20,000ha.

Due to the difficult terrain, fires were initially and aggressively attacked by aircraft, with the assistance of 13 medium and light helicopters assigned to the fires in the Larne camp area. As Alberta's daylight ended at around 10pm each night, this provided an opportunity to utilise aircraft for longer hours than in Australia. Firefighters on the ground included Australian's filling the DivCom and Sector Leader roles, leading firefighters from Mexico, Ontario and Alberta. By the time the crew left Larne camp, all four fires were contained, at patrol status and handed back to local control.

Although firefighting techniques are generally the same everywhere, the challenges for an Incident Controller included bringing a group into an unknown landscape, the differing terminology, policies and procedures and management of crew welfare by monitoring levels of jetlag, exhaustion and sleep deprivation as a result of around 16 hours of daylight. Everyone at the Larne camp was well trained and experienced and more than willing to assist in any capacity they were able.



Taking care of country

Planning an effective cultural and hazard reduction burn can take a huge amount of planning and collaboration. On the Mid North Coast recently, an especially complex cultural burn took months to plan but the benefits are set to be far-reaching. Jamie Bertram, Community Safety Officer, Mid North Coast reports. Photos by Craig Stehn

In August 2015, 12 hectares of heathland at the southern end of the Coffs Harbour Airport was burned by a crew of female Aboriginal rangers, local Aboriginal women, female members from several local NSW RFS Brigades and staff from Coffs Harbour City Council and the Nature Conservation Council.

Through collaboration, the participants considered a complex set of cultural, ecological and safety concerns. The benefits included improvements in bush fire safety, enhanced vegetation communities, the stimulation of bird life in the Coastal Wallum Heathland and an opportunity to develop greater cultural links between local Aboriginal groups and other organisations in the area.

Over the three years of planning the NSW RFS played a mediating role between the Council, Aboriginal groups in the area, Local Aboriginal Land Councils, the Nature Conservation Council, local airport and CASA. Through discussion and negotiation all the requirements were met resulting in a positive outcome for all concerned. There were numerous meetings and field assessments with Airport management, Air Traffic Control, Coffs Harbour City Council Environmental Engineers', Airport grounds staff, CEO for the Coffs Harbour Local Aboriginal

Lands Council and the female Aboriginal rangers.

The two-way learning process that occurred throughout the planning and implementation of this burn has been extremely beneficial to improving cross-cultural relationships and understandings between agencies and Aboriginal communities. It was also a great success for the environment and community in the area.

TOP: A cultural and hazard reduction burn held near Coffs Harbour was a collaboration between several agencies and several indigenous groups in the area. Photo by Craig Stehn

Why burn?

The area may have been without fire for close to 30 years and hazard reduction on the site was vital – the Coffs Harbour Regional Airport lies to the north, the Southern Cross University to the south west, and the main North Coast railway line is only 400m west of the burn site.

An old tram line used to haul timber to the Coffs Harbour Jetty last century was also included in the burn area and needed to be protected.

The local vegetation also needs fire to thrive.

Local ecologist, Greg Elks, has worked with the Coffs Harbour Local Aboriginal Land Council's Darrunda Wajaar Rangers team, to establish monitoring plots across the site.

"Fire is an important part of the ecology of many Australian vegetation communities. Wet heath communities like this one require fire to maintain diversity over the long term," said Greg.

Low intensity fires would create gaps in the ground cover to allow germination of generalist species from soil seed banks. The burn was planned for the cooler, wetter month of August as wet soil reduces the risk of destructive peat fires in the coastal heath swamps.

While the reasons to burn were many, several important considerations had to be taken into account, not least the Aboriginal significance of the area.

A sacred women's site

On the northern sector of the planned burn, local Aboriginal women identified a woman's mythological site which means, where possible and practical, women were required to carry out the burning. Female rangers from the Minyumai Indigenous Protected Area (IPA), near Casino, assisted with NSW RFS female volunteers from the local brigades including Red Hill and East Bank Brigade. Local Gumbaingirr women for whom the land is their traditional country, and female rangers from Minyumia were also trained and included in the burn. In total there were eight



ABOVE: Alita Carbery, a local Gumbangirr woman, was part of the entirely female crew who implemented the burn. Photo by Craig Stehn



It was such a privilege to be able to be involved and to be able to share my experience with my daughter and the younger generation.

Alita Carbery, a local Gumbangirr woman from the local Darrunda Wajaarr Working on Country Team

women involved in the burn, four of whom were Aboriginal rangers.

Fifteen men were active on the southern sector of the fireground; brigades involved were Red Hill Brigade, Boambee Brigade and Eastbank Brigade.

Engaging the women from the Minyumia IPA was a useful addition to the burn. These rangers are partners in the Nature Conservation Council's Firesticks Project which is also supported by NSW RFS. Attending additional burns outside of their IPA, such as this burn at the Coffs Harbour Airport precinct, enables the rangers to gain further confidence in implementing burns in a variety of vegetation types and working with other stakeholders such as the NSW RFS, council and land care groups. This in turn is an opportunity for the rangers to share their own knowledge and experience in fire management and caring for country.

Training has been delivered by the NSW RFS District staff and the Corporate Training Unit to 33 Aboriginal rangers in the Coffs Harbour District. Bush Fire Awareness was initially delivered to rangers in 2008 at the Mid North Coast Team Fire Control Centre. Following this the rangers were interested in Bush Firefighter which was delivered in Corindi Beach at the Yarrawarra Conference Centre and a second course was delivered west of Kyogle at the Toonumbar Water retreat. The Service has gifted NSW RFS PPE to all those rangers who have received training.

With this team of men and women, equipped with cultural

understanding and knowledge of firefighting, everything was almost ready to conduct the burn. But safety concerns around the airport and ecological considerations also had to be taken into account.

Proximity to Coffs Harbour Airport

The burn was directly south of the north/south runway at the Coffs Harbour Regional Airport. The main concern was the potential for fauna, especially birds, to move onto the airport land and runways during and after the burn.

Timing of the burn was therefore crucial. The burn had to be conducted during the evening, once the last domestic flight had set down. Airport Safety Officers were instructed to initiate bird control techniques if required over the coming days and a notice was issued to all aviators using the airport alerting them to the increased risk.

On the day

On the evening of 8 August 2015, there was a light breeze and cool temperatures – conducive conditions for a burn.

The participants waited for the touchdown of the final Qantas domestic flight and then commenced the burn, at approximately 1720hours.

The female rangers began ignition on the north-west corner of the burn site. The other crews were established along the remaining sectors of the burn. Once the burn backed in a safe distance the lighting was taken over by the other sector commanders. Routes were left for fauna to escape the burn.

After months of meticulous planning, the burn went well and there were no escapes.

The next day a good rain fell across the fireground and the burn was patrolled for two days.

Post burn assessments

In the months after the burn, the site has had a flush of new growth and an abundance of wildflowers. This will benefit nectar-feeding birds and insects, which will lead to an increase in breeding. Small mammals like the New Holland Mouse are expected to thrive in the first few years after the fire, as the new growth will provide an abundance of shelter and food.

The Darrunda Wajaarr Ranger team have been regularly returning to assess the response of the vegetation and will undertake ongoing post-burn weed control. The Darrunda Wajaar Ranger team, along with an ecologist, will continue to monitor and conduct research on the site for the next three years. It has been an ideal opportunity for the rangers, including local Aboriginal youth, to develop greater skills in vegetation monitoring and research.

Among the many benefits to bush fire safety in the area, and to the flora and fauna in the area, this planned burn has seen the development of important partnerships between Coffs Harbour City Council, the NSW RFS and the local Aboriginal community.

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Large Air Tankers (LAT) and Very Large Air Tankers (VLATs) arrived in NSW for the 2015/16 fire season. Faster airspeed and larger fuel tanks enable LATs and VLATs to deliver more suppressants in a shorter time frame than the aircraft currently in use in Australia to date. They can reach almost any location in NSW within an hour while carrying a full payload and the capacity to immediately contribute to the local firefighting effort. A lead plan accompanies the air tanker on their missions to assess the fireground and determine the most effective firefighting tactics. The LAT/VLAT program is on trial for two years. Here is a profile of the aircraft that were used for the 2015/16 fire season. An assessment will be done of the 2015/16 trial to determine which aircraft will be used in the 2016/17 fire season.



NSW RFS AIR SUPPORT

LEAD PLANE BIRD DOG CALLSIGN BIRD DOG 275 ROCKWELL TURBO COMMANDER

One of two Bird Dogs available to the NSW RFS. Fast and adaptable these intelligence-gathering aircraft assess the fireground, determine the best flight path and then lead the huge air tankers across the fireground showing them where to drop their load of gel or retardant using a smoke generating machine.





NSW RFS AIR SUPPORT

BUSH FIREbulletin // LIFTOUT 27

NSW RFS AIR SUPPORT

CAPACITY TO DROP 44,000 LITRES OF WATER OR SUPPRESSANT

THREE EXTERNAL TANKS ARE BUILT BY ERICKSON AND ARE SAME DESIGN AS AIRCRANE TANKS TANKS HAVE INTERNAL BAFFLES TO PREVENT FLUID SHIFT (AND CONSEQUENT SHIFT IN CENTRE OF GRAVITY) WHILE IN FLIGHT

MW K 10 SAMELING NSW RURAL FIRE SERVICE

> CAPABLE OF SPLIT OR MULTIPLE DROPS

EXTERIOR BELLY-MOUNTED TANK

> ENTIRE LOAD CAN BE DUMPED IN EIGHT SECONDS

A THREE-ENGINE TURBO-FAN

ET CIVILIA RANSPOR AIRCRAFT TH 73,000 THRUST

11.1



OPERATIONAL FROM MILITARY OR COMMERCIAL AIRSPACE ONLY

28 BUSH FIREbulletin // LIFTOUT

TRAVELS AT 650KPH WITH MAXIMUM PAYLOAD

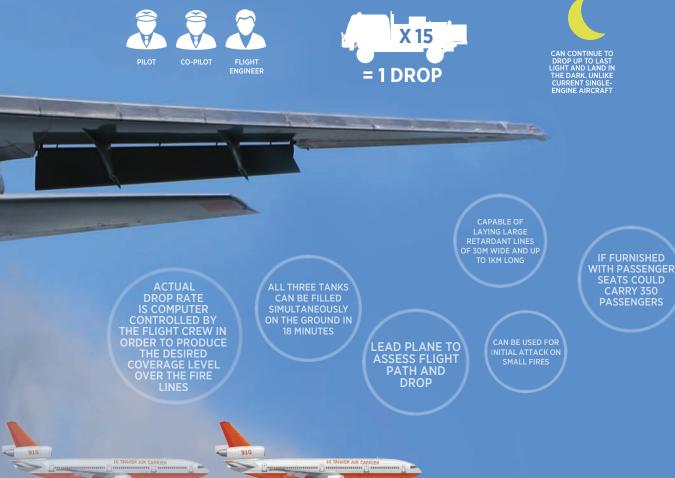
FULL PAYLOAD AIR TANKERS CAN REACH

VERY LARGE AIR TANKER

DC10 SOUTHERN BELLE

CALLSIGN BOMBER 910

The *Southern Belle* DC10 arrived in NSW in October 2015 as part of the two year trial of Very Large Air Tankers in NSW. With cruising speeds of up to 650kph, it can reach any location in NSW within an hour and is capable of dropping 44,000 litres of water or suppressant (gel or retardant).



CRUISING SPEED (LOADED) OF 650KPH

ALMOST ANY LOCATION IN NSW WITHIN AN HOUR

MAXIMUM PAYLOAD RANGE OF 1,950KM OR THREE HOURS FLYING TIME FROM AIRBASE



BREATHE WITH CONFIDENCE

Breathe with confidence

All firefighters need protection from dust and smoke on the fireground. P2 Respiratory Masks are designed for this purpose.

It's important to fit a P2 mask before entering into a situation where dust or smoke and materials containing asbestos could be inhaled, such as an active fireground. The masks provided by NSW RFS meet and exceed the Australian Standard AS/NZS716 and are fire retardant.

To suit different face sizes and shapes, the NSW RFS provides four styles of P2 mask. This ensures that members find a mask that seals properly, to provide the maximum protection. The effectiveness of a P2 mask is reduced if the member has facial hair. Visit MyRFS to download the P2 fitting guides. To order P2 masks, contact your brigade or district.

A facelift for our flagship

The Cat 1 is the NSW RFS flagship firefighting vehicle with more than 1,600 currently in service across the state. The design and features of the Cat 1 single cab and crew cab Grasslands, Village and Multi-purpose vehicles have recently been upgraded with improvements to manual handling of stowed items, noise emissions, lighting and firefighter welfare. Here, Manager Engineering Services, Andrew Canderle, explains what to expect in the 2016/17 build.

At your fingertips

Customised stowage areas in the new Cat 1 make accessing and storing tools easier and more efficient. The improvements include a re-design of the headboard to stow five rake hoes, brush hook, broom, two hydrant bars, storz spanners, fitment of 75mm and 38mm suction hoses, floats and strainers. This will make it easier to access hand tools from one area and from the ground.

The standpipe holder has been re-designed to hold the NSW RFS red standpipe and the Fire and Rescue NSW (FRNSW) white standpipe. The standpipe holder is also easier to use.

Access to foam pails has been improved. They are now located in a slide out tray near the rear of the truck. It will be easier to change the pails and the induction tube is now stainless steel and is drawn through a manifold, which will make foam class selection simpler.

New to this Cat 1 is the inclusion of electric hose reels which have been designed with a hose lay. This will take the headache out of returning the hose to place.

The access steps to the platform have been redesigned for easier use.

Front-mounted monitor

The new Grasslands Cat 1 will include a front-mounted bull bar monitor, similar to the Cat 6. This feature allows a one or two person crew to control or extinguish a grass fire from inside the cabin.

The main pump is matched to the front monitor which is controlled by the operator in the cab through the remote mount controller.

Brighter and better

The Cat 1 has an entirely new and improved lighting package including newly installed perimeter lighting, improved on-scene lighting, new locker lighting and improved driving lights and tail lights. All lights are LED style. A lighting assessment was conducted at the NSW RFS Mogo Training Centre in September 2015 where several styles of lighting were tested.

Plans are in place to retrofit this lighting package to existing appliances as well as installing it on different types of appliances as contracts are renewed.

Firefighter welfare

Access to cool water is vital for firefighters on the fireground. The new Cat 1 has a dedicated welfare locker which can include a portable refrigerator and has space for other items. The refrigerator is installed in a drop down holder and is powered through a charging socket in the battery charger in the station and powered by the appliance out of station. Portable devices now may be charged through on-board wiring when out of station or in station.

Stronger but quieter pump

The Gaam MK 300 pump has been installed with new suction plumbing to improve hydraulic efficiency, ease of operation and utilisation of available space.

Noise from the pump has been assessed over recent years. While the noise emissions have not increased over time, this new-design Cat 1 has a pump enclosure to attempt to reduce any noise emission. Further tests will be undertaken to ensure that a reduction of noise has been achieved.

Greater capacity

A larger tank for both the single cab (now 4,500l) and crew cab (now 3,500l) have also been included in this design.

These design changes will be in production on both the Cat 1 single cab and Cat 1 crew cab appliances in the build for 2016/17.

You can find out more by contacting the Engineering Team at engineering@rfs.nsw.gov.au.

The new Cat 1 has a dedicated welfare locker which can include a portable refrigerator and has space for other items.



The foam pails are now located in a slide out tray, making it easier to change the pails. The slide out foam stowage incorporates stainless steel induction tubes and an induction manifold.



A new headboard incorporates dedicated stowage for five McLeod tools, brush hook, broom, two hydrant bars, stortz spanners, 75mm and 38mm suction hoses, floats and strainers. There has also been a re-design of the standpipe stowage.



A remote control monitor is mounted on the front bull bar of the new Grasslands Cat 1.



The front monitor is controlled by the operator in the cab through the remote mount controller.



An additional side equipment locker has been added incorporating a drop down holder for portable fridge.



The electric hose reel has been designed with an auto hose lay.



New Cat 1 in detail

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NSW RURAL FIRE SERVICE

B

ENGINEERING 1B

- A Improved LED lighting package including perimeter lights and on-scene lighting
- B Larger and customised stowage for easier access to tools
- (C) Welfare locker with room for fridge
- (D) Easy access to foam
- E Electric hose reels with auto lay

- F Rear camera
- G Pump with new suction plumbing and buffer to reduce noise

D

G

- (H) Larger tank
- (I) Front-mounted monitor
- NB: Photo shows the prototype built by NSW RFS Engineering Services



HORACE UP Cadets shaping the future of firefighting

By Kristine Wendtman, Deputy Cadet Championship Manager Photos by Shane Geerin and Paul Best "Right from our arrival when we saw all of the equipment and trucks out and ready for the events, through to meeting the other teams and sharing experiences, it was an amazing experience. We have created life-long memories, and all our Juniors are wanting to participate again."

Over 150 cadets from emergency services across Australia attended the Australian Fire Cadet Championships at Myuna Bay Sport and Recreation Centre in Lake Macquarie, 28 September to 1 October 2015.

Jointly hosted by the NSW RFS and the Rural Fire Service Association (RFSA), the fifth Championship saw twenty five teams from NSW, Victoria, South Australia and Western Australia gather together to compete.

The NSW RFS and RFSA have co-hosted this national event since its inception in 2007. Commissioner Fitzsimmons said the NSW RFS sees tremendous value in the development of young people, as demonstrated by the Service's continued commitment to hosting the Championships in NSW and its ongoing support of the NSW RFS Secondary Schools Cadet program.

During the four-day event the cadets, aged between 12-16 years, participated in eight simulated scenarios designed to test their skills, initiative and knowledge of safety procedures. These include a portable pump relay, a hose and hydrant drill and a tanker and ladder exercise. Intermingled with the competitive events were a series of team-building and leadership activities which had them tackling activities such as canoeing, high ropes and raft-building.

"While the Championships are competitive, speed is only one small element in the judging," said the event's Incident Controller and The Lakes District Manager, Paul Jones. "What we're really trying to assess is their ability to work as a team, to work safely and to achieve the desired outcome," he said.

For some cadets this was a chance to catch up with old friends from previous events, while for those who had never competed before, it was a whole new world where new friendships were quickly formed. Regardless of their level of experience, all the teams stepped up to the challenge, developed their skills and created a positive and fun atmosphere throughout the Championships.

Months of training paid off for St Paul's Cadets who were crowned the 2015 Champions at the medals presentation on the last day of the event. St Paul's is the most successful team in the history of the Championships, with three titles (2007, 2009 and 2015) and one runner-up crown (2013).

St Paul's was followed closely by runner-up South West Slopes Cadets, with Western Australia's Quinns Rocks team placing third. A special mention goes to the Southern Highlands team who placed fourth overall in their very first competition.

Southern Highlands District Junior Coordinator Damian Cutmore said the District's participation was driven by Junior members themselves.

"The event itself was fantastic," Damian said, "Right from our arrival when we saw all of the equipment and trucks out and ready for the events, through to meeting the other teams and sharing experiences, it was an amazing experience. We have created life-long memories, and all our Juniors are wanting to participate again." The Southern Highlands District has already seen the benefit of their team's participation in the Championships.

"The Juniors who attended the Championships are getting more involved," he said, " and they are also more confident around the more experienced firefighters. Across the District, we have also seen an increase in the number of brigades who want to start a Juniors program.

"For our team of Juniors it was a very worthwhile exercise," he said. "The regular training in the lead up to the event has cemented them as a team of friends and as a team of firefighters. In a few short years they will be working on the fireground together. All in all, I feel we have a great future for Junior firefighters and the Australian Fire Cadet Championships are an integral part of that."

Behind the scenes, around 60 local volunteers from The Lakes District and event marshals from across the State helped to make the event a success. Event Marshal for the Fun Zone and after hours activities, Lesley Smith, said everyone had a great time at the championships.

"We all had as much fun as the Cadets!" she said, "Cadets from all teams really played well together and showed great camaraderie and a willingness to help each other out."

In 2017 the NSW RFS will again co-host the Australian Fire Cadet Championships with the RFSA. The event will be held 3-6 October 2017 at Myuna Bay Sport and Recreation Centre in Lake Macquarie.

RESULTS AND Special Awards

First Place Overall St Paul's, NSW

Second Place Overall

South West Slopes, NSW

Third Place Overall

Quinns Rocks, WA

Dave Templeton Award

Awarded to an individual cadet who has demonstrated through action and attitude the qualities which best represent the Championships

Kurtis Woods, Gulgong, NSW

Most Improved Team Award

Awarded to the team that achieved the greatest overall improvement in events with multiple runs

NSW SES, Mid North Coast, NSW





Event Marshal Troy Gersback ensures the crew has the fence well under control



As with most crews, the Lake Macquarie Cadets had to 'carry' their Crew Leader



The SES Cadets proved to be fast learners, picking up the Most Improved Team Award



Some outstanding performances on the VERY high wire



You can give a crew a bucket but ...





Not wanting to name names but some teams went in for shameless displays of self promotion



Some teams had to pay dearly for their 'infractions'

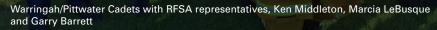




14 (S.

Champions St Paul's Cadets (centre), runners up South West Slopes (left) and third placed Quinns Rocks with Commisioner Shane Fitzsimmons









It's personal

The NSW RFS has used extensive feedback from members, as well as research and the latest behavioural science, to develop the new 'I Am Fire' public awareness campaign and revamp the Bush Fire Survival Plan. Nathan Maddock, Communications Officer at the Bushfire and Natural Hazards CRC reports.

ABOVE: Talking to residents about their Survival Plan and encouraging them to talk about what they will do is key to the success of the current public awareness campaign. Photo by Adam Streichler

People generally do have a good appreciation that they live in an at-risk area. The problem is that they do not personalise that risk; they think it will happen to somebody else. It is not a new finding, but the scale of this was surprising.

Anthony Clark, Director Corporate Communications, NSW RFS

New ground was broken in 2013 for bush fire in NSW when catastrophic fire danger ratings were issued for heavily populated areas the first time in the state. The most challenging year for bush fires in NSW in more than a decade saw temperatures soar in January of that year, setting new records.

With the extreme temperatures and strong winds, many fires took hold. Three of the most significant were at Yass. Coonabarabran and Deans Gap in Shoalhaven. These fires were followed in October 2013 by a series of fires in the Blue Mountains-the huge State Mine Fire, along with fires at Mount Victoria and Springwood—and dangerous blazes in the Southern Highlands and around Port Stephens. The fires in the Blue Mountains destroyed more than 200 homes in just a day.

Following these devastating fires, the NSW RFS had an opportunity to find out just how communities had coped under duress. Had members of these communities planned and prepared for a bush fire appropriately? Did they even consider themselves at risk of a fire? The NSW RFS called in the Bushfire CRC, and then the **Bushfire and Natural Hazards** CRC (which began in July 2013), to conduct communityfocused research in fireaffected areas.

"2009 was really a turning point for communication and engagement activities for fire services," Anthony Clark, Director Corporate Communications at the NSW RFS, explained.

"We had had the same approach for a very long time and suddenly there was a renewed focus, shifting away from 'Prepare, stay and defend or leave early' to survivability. A much stronger emphasis was placed on planning, preparation and bush fire survival plans."

Victoria's Black Saturday bush fires in 2009 had changed the landscape of community bush fire safety across the whole country. Fire agencies had been operating in this area for several years, but bush fire preparation and planning became a lot more sophisticated.

"After Black Saturday, the pendulum swung so far in one direction because there was so much new material that was being put out to the community," Mr Clark said.

A new approach

NSW RFS had a large amount of quality data at its disposal thanks to the CRC research in 2013. Interviews had been conducted with 432 households affected by the fires, alongside 775 completed online surveys from across the state. The findings showed that the bush fire safety messages were not getting through to the community. The NSW RFS needed to change its approach.

"The research through the CRC after the fires showed us that fire safety information actually became quite overwhelming for many people," said Mr Clark.

"Fire agency messages are quite complex, not just for communities, but for our own people too. Fire is such a complex beast that when you start considering things like fire danger ratings, alert levels, messages around hazard reduction and fire weather warnings, it becomes quite overwhelming for people. This was one of the key findings that came out of the CRC research."

There were three main findings that the NSW RFS believed

were the most important to how they approached community bush fire safety people not personalising the risk, people not understanding how a bush fire would affect their house and people thinking bush fire preparation was just too hard.

"People generally do have a good appreciation that they live in an at-risk area. The problem is that they do not personalise that risk; they think it will happen to somebody else. It is not a new finding, but the scale of this was surprising," said Mr Clark.

"It is the 'She'll be right mate' attitude. People thinking it will happen to someone else, so why would I bother doing anything about it."

CRC researchers spoke with people who were directly affected and living in the fire scar areas including in the Blue Mountains. Many of them simply had no appreciation for the real risk of fire. They knew a fire could happen, but they did not actually think about how it would affect them.

Revamp of the Bush Fire Survival Plan

Writing down the household bush fire plan has long been advocated by fire agencies. It was considered that if a household did not do this, residents would not be prepared.

"Over the last few years in Australia we have probably overstated the importance of a written bush fire plan, and we have probably been unrealistic in our expectations of the community," said Mr Clark.

"It can be as fun as doing a tax return. Nationally, because of the expectation of people having a written bush fire plan, fire agency expectations are

A very concerning gap

At lot of work has gone in into the new Guide to the Bush Fire Survival Plan. We are seeking to address the very concerning gap between what people know they ought to do and what people are actually doing.

The most recent research which we conducted with the Bushfire and Natural Hazards CRC, following the 2013 fires, showed that 73 percent of all the people in the most adversely affected areas knew that they were at risk and they claimed that they had a plan as to what they would do. Yet it was identified that only seven percent had actually met with their family and written anything down as to what they would do in the case of a bush fire. So people have an idea in their heads versus sharing, understanding and actioning that. It is this gap that we are trying to close.

Overwhelming research also showed that most people viewed the existing Bush Fire Survival Plan as too onerous; too daunting...It was just one of those things that you would put off no matter what. So we have tried to address that feedback.

It's really about the little things that can be done today that are not too onerous but can make all the difference tomorrow should you be threatened by a bush fire.

> Commissioner Shane Fitzsimmons



FIRE HAS A PLAN. YOU NEED ONE TOO. There are simple steps you can take to protect your home and family. like deciding in advance what you will do.

PREMARE AGE SUMURE FOR MORE SIMPLE STEPS GO TO MYFIREPLAN.COM.AU

I AM FIRE. I CAN RACE UP HILLS AT 25 KM AN HOUR. YET SOME PEOPLE WAIT UNTIL I'M ON THEIR DOORSTEP.



disconnected from the reality of the community actually doing it."

RIGHT: The 'I Am Fire' campaign

has been active across TV, radio, print and online since September

2015. "We are presenting people with some of the cold hard facts."

Using the three key research findings, NSW RFS set about completely revamping its bush fire survival plan information.

"It is a complete rewrite," Mr Clark said. "We have adjusted a lot of the messaging so it is more concise and relevant, while maintaining the national consistency we have strived so hard for."

"For the first time with our bush fire survival plan, we have gone out to the community and asked them what would work—sitting down with people as they work through the plan to see what works and what doesn't. We have really simplified the process and focused more on the discussion that people can have about making their plan.

"The bush fire survival plan had become more of a product, but we actually need to focus on the *process* that people go through so that they have a better understanding of their personal capacity, their limitations and their ability to actually plan and prepare for a bush fire."

Mr Clark explained that NSW RFS testing, conducted with behaviour change experts Behavioural Architects, has shown that people are more inclined to use the new material because it is more user friendly.

"The research that we have done through Behavioural Architects showed that people thought completing a bush fire survival plan may take a whole weekend or even longer. There was simply so much information factored in. Our testing has shown that people are confident of completing the new plan in about 20 minutes.

"Completing this plan is the first step for people and if they do want more detail in their plan, the information they need is still accessible."

Increasing awareness

The research provided further opportunities for NSW RFS to tweak its community safety approach. Public safety campaigns are not undertaken lightly, but the data have helped NSW RFS create its new bush fire awareness campaign, which will run for the next three years across TV, print, radio and online media.

"Our approach now is to personalise fire," said Mr Clark. "It is a pretty big shift for us.

"We have developed the 'I Am Fire' campaign that challenges some of the myths and misconceptions. We are presenting people with some of the cold hard facts, things like: 90 percent of homes destroyed during a bush fire are actually destroyed through ember attack. We are giving people the simple steps that will make a difference to the survivability of a person or a home during a fire."

Animated videos

Included in the 'I Am Fire' campaign are online videos which focus on simple steps that people can undertake that will make a big difference to the safety of themselves, their family and their home if a bush fire were to threaten. Examples are given of the three things that can be done around the home that will make the biggest difference to its survivability.

"There has been a big disconnect between our expectations as fire agencies and the reality of the community actually completing this work," said Mr Clark.

"If we present to people that it is easy, that it is do-able, people are more inclined to do it. This is a direct outcome of the CRC research."

Reality check

The research has also taken NSW RFS personnel on a journey too, helping to crystallise messages. "The research has also been really important in delivering a bit of a reality check to our own people," explained Mr Clark.

"CRC lead researcher Dr Jim McLennan presented at our community engagement conference in 2014 and a lot of people were really shocked by the national figures around the take-up of written fire plans. It made us question our approach and really look for alternatives that would make a difference to the safety of the community. Getting our own NSW RFS volunteers across the research has been instrumental in bringing all of this together as well."

Mr Clark believes that while it is still important to use the expertise of people in the fire and emergency services, at the end of the day, the product has to be what the community finds useful.

"This is a good example of the need to go out to the community, to take guidance from the community and test ideas, to make sure we are actually doing something that will ultimately be accepted."

This article first appeared in the Spring 2015 edition of *Fire Australia magazine*

Getting ready for bush fire is easier than you think

Did you know around half of those people living in at risk areas believe their home would survive a bush fire, even if they have done nothing to prepare? And most people believe preparing for bush fires is too hard, time consuming or costly?

Research revealing these facts has prompted the NSW RFS to develop a new, easier approach to helping people plan and prepare for bush fires.

Following consultation with members, experts in behaviour change were engaged to help develop a simpler, easier tool to help the community prepare.

What's changed?

- The name The old title was the 'Bush Fire Survival Plan'; the new is the 'Guide to making your bush fire survival plan'. This shift emphasises personal action and discussion. For example, we don't say 'download a bush fire survival plan' we say 'get the guide to making your bush fire survival plan' or 'discuss your bush fire survival plan'.
- New format A key change based on testing results was a shift to a folder format instead of a booklet, which helps people break down the tasks and see them as achievable.
- New prompts These are designed to make it easier for people to act, such as a new discussion guide, simple icons, and easy-to-follow checklists.

While the content has been simplified, more in-depth information remains available on the NSW RFS website and in fact sheets. The MyFirePlan app for phones and tablets is also an effective way for people to complete their bush fire survival plan, and will be updated in the future to match the hard-copy guide.

The MyFirePlan website, released as part of the new Prepare. Act. Survive. communications campaign, also helps the community to understand their risk and take simple steps towards getting ready for bush fire.

- Consider the circumstances of the person you are talking to and try make your discussion personally relevant to them.
- Don't overwhelm people
- Keep your information and advice simple and clear, and when you think people are ready to start discussing their plan or preparing their house, give them a guide to follow.
- Use a number of communications channels Such as Facebook and Twitter

Key messages when discussing the guide

There are four simple steps to get ready for a bush fire:



DISCUSS what to do if a bush fire threatens your home

Many households find that having a discussion over dinner works best as everybody is together and focussed.



PREPARE your home and get it ready for bush fire season

There are simple things you can do around your home to prepare it for a bush fire, like keeping the grass low and having a cleared area around your home.



KNOW the bush fire alert levels

If there is a fire in your area you will find its alert level on the NSW RFS website and in the 'Fires Near Me' app. You need to keep track of the alert level so you know what you should do.



KEEP all the bush fire information numbers, websites and the smartphone app.

In a bush fire, it's important that you stay up-to-date on conditions in your area.

Talking to people in your community about the new guide? Some tips

- **Talk to people** Don't just hand out the guide. Having a conversation is one of the most effective ways members can help the community get ready for bush fires.
- **Personalise your communications** Consider the circumstances of the person you are talking to and try make your discussion personally relevant to them.
- **Don't overwhelm people** Keep your information and advice simple and clear, and when you think people are ready to start discussing their plan or preparing their house, give them a guide to follow.
- Use other communications channels Use existing community relationships and your community engagement activities to support and involve the guide. Use Facebook and Twitter to help get the message out.

Got a question?

You are welcome to ask any questions or submit feedback to the Community Engagement Team via email: community. engagement@rfs.nsw.gov.au



LEFT: The NSW RFS has released a new guide to making a bush fire survival plan, following consultation with members and experts in behaviour change.

Having a conversation is one of the most effective ways members can help the community get ready for bush fires. Following a personal discussion, members can provide a copy of the new guide to help reinforce what they've said and help people follow the conversation with actions. See the Guide online at www.rfs.nsw.gov.au/plan

and hard copies can be ordered through the regular Community Engagement resource process. For more information about the Guide and how to use it, visit MyRFS

LOO-CC A call to volunteers: NSW RFS members re-enact the recruitment marches of 1915

2015 was the year of the Centenary of ANZAC and re-enactments of the 'snowballing' recruiting marches of late 1915/ early 1916 were held around NSW. Bill Duncan OAM, Vice-President Kenthurst Brigade, joined other NSW RFS members to be a part of the re-enactments and encourage the spirit of volunteering at every stop along the way. He writes here about the once-in-a-lifetime walk across the NSW landscape.

The Cooee march from Gilgandra to Sydney held in 1915 is the best known.

The march was an enlistment drive for the Australian Army following the tragic losses at Gallipoli and on the Western Front. In all there were nine marches, each one started with just a few men but their numbers snowballed as they marched from town to town signing up more recruits as they went. Communities along each route came out to greet them, provide hospitality and cheer them on their way. Indeed, children in almost every classroom in many rural schools can trace their family heritage back to great grandparents or uncles and aunts who enlisted at that time.

A re-enactment of these recruitment marches was held in October and November 2015 and many of NSW RFS members were involved. Colonel Kim Templeton AM (retd), an NSW RFS volunteer with Colinton Brigade in the Cooma-Monaro District, played a leading role as well as several members from my own brigade in Kenthurst such as Brigade President, Bruce Linton, plus father and son team, Matt and Brad Willis.

The re-enactment marches were largely organised by a small group of retired officers of the Royal New South Wales Regiment. This Regiment effectively inherited some of the old battalions who enlisted during the marches. As the Kookaburra march organiser and Kenthurst Brigade Vice-President, I am also a retired officer of the Royal NSW Regiment. We saw it as our responsibility to acknowledge those brave men and women by re-enacting the march.

Most of the marching reenactment groups adopted a uniform to give them an

authentic 1915 look. The Kookaburras collarless blue bushies shirts, brown waist coats and neck scarves with wide-brimmed country hats certainly made an impression!

Generally, we marched in the relative cool of the mornings, following the route taken a century ago. Although we could not walk along some busy sections of highway, we did experience the authenticity of several sections of the original march - including dirt roads, overnight stays in 1800's-built shearing sheds, community halls and showgrounds. It was like stepping back in time!

The march was an opportunity to talk about the value of volunteering in service of one's community. As the Kookaburras progressed from town to town we encouraged everyone we met to get involved their local community. Whenever possible, local army

cadets, NSW RFS, SES, VRA, Scouts and similar groups joined us in the march in town ceremonies and other activities to profile the community contribution options that are available. Reciprocally, the Kookaburra marchers were often hosted to meals and even bush dances along the way!

We found ourselves having to 'sing for our supper' by regaling our hosts with WW1-era poetry and song as well as visiting schools, retirement homes and cultural facilities to build community pride in our heritage.

Over the couple of weeks that we were on the road in Western NSW, several jeeps and other types of historic military vehicles joined us to help carry camp stores and supplies. Their interesting vintage vehicles were a drawcard everywhere we went, especially amongst the school kids!

The march started in Tooraweenah and we arrived in Kenthurst, in Sydney's north-west the night before Armistice Day so we could get into the city early on the morning of 11 November 2015. We were welcomed in Kenthurst by Patron of the Re-enactment Marches, Major General Warren Glenny, AO, RFD, ED who 'inspected the parade' with a bagpiper escort. Fortunately none of our neighbours complained about shouted military orders or bagpipe music!

I was proud to play a part in this once-in-a-lifetime project. We made new friends plus we achieved a lot by way of honouring our forebears and Australian heritage as well as encouraging modern citizens to carry on the ANZAC volunteering spirit.



ABOVE: A group of Kookaburras and local Ilford /Running Stream Brigade members with their Cat 1 tanker in front of their fire shed

COMING
SOON2016
New events
and location







NSW RURAL FIRE SERVICE STATE CHAMPIONSHIPS

16-18 September 2016, Narrabri Showground Complex

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GILBERT & ROACH Huntingwood



Australian Fire Service Medal Recipients

Queen's Birthday 2015 and Australia Day 2016

Australia Day 2016



Phillip Baer

Deputy Captain Phillip Baer South West Slopes Zone

Phillip Baer's tireless commitment and leadership qualities in the area of professional development and training have resulted in a significant increase in the competency level of members within the South West Slopes Zone the past 10 years. Under Phillip's stewardship brigades in the Zone have been more accepting and willing to participate in training. Phillip has led sector commanders and crews while working as a Divisional Commander at the Wallendbeen, Geegulalong, Watershed and other Section 44 fires. Crews are always keen to follow Phil's calm methodical leadership approach. Phillip has been strike team leader to major incidents and many out-ofarea deployments. Phillip is currently a Deputy Captain of the Frogmore Brigade and member of the Zone's training committee.



John Bourke

Firefighter John Bourke Illawarra Zone

John Bourke joined the Mount Kembla Brigade in July 1974. He was a Deputy from 1975 quickly becoming Captain from August 1980 for nine years. Under his hard work, leadership and fundraising skills, the brigade grew quickly. This included moving the station to a new location, extending the new station and building better trucks and equipment. When not attending incidents, he uses his wealth of knowledge and experience to be a key mentor to the brigade and more generally across the NSW RFS. He has enlisted his whole family into the Service. His wife is Treasurer and Welfare Officer, five children as firefighters, three as Deputies and two as Secretary. While John would rather be on the trucks serving his community than receiving an award, he does make an honourable and a worthy recipient of the Australian Fire Service Medal.



Darryl Lang

Senior Deputy Captain Darryl Lang Lower North Coast Zone

Darryl Lang commenced his service as a volunteer firefighter with the NSW RFS in January 1957 and since then has held a range of ranked positions at Gumma Brigade as well as Group Captain for the Lower North Coast Zone. As Group Officer he has mentored many other leaders tutoring them to be deal with difficult situations while under extreme pressure. firefighters respect Darryl for his years of leadership, knowledge of NSW RFS culture and his ability to pass on these important leadership skills. Darryl has always promoted the organisation in a sincere way. His commitment to promoting the NSW RFS has included but not limited to: Open Days, Community Education displays, information nights, instructing and assessment of members, collection of brigade and Fire Control vehicles and generally making sure that the NSW RFS is always represented professionally.

Thirteen of our most dedicated and committed members were awarded the Australian Fire Service Medal (AFSM) in the past 12 months. These outstanding individuals have been nominated for this honour by people and communities they have served over many years. The AFSM is a national award and the highest honour in the firefighting industry and it recognises distinguished service by a member of an Australian fire service.



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Kevin Martin

Group Captain Kevin Martin The Lakes Team

Kevin Martin commenced his service as a volunteer firefighter in December 1979 joining the Charmhaven Brigade and has held ranked positions such as Brigade Captain, Deputy Group Captain and Group Captain. With the growth of population in the Charmhaven Brigade area, Kevin was instrumental in the planning and building of the new station which now comfortably meets the needs of members but also easily houses new modern firefighting appliances. He has assisted at many incidents both locally, across NSW and interstate. In 2013 he was instrumental in the Ruttleys Road Fire, the largest and most intense fire within the Wvong area for many years. Kevin's knowledge, experience and leadership on the fireground ensured that despite very difficult circumstances. property damage was minimal and there were no firefighter injuries. He is a passionate advocate for improving the district's capabilities as well as representing the concerns of volunteers.



Leslie Nowland

Deputy Captain Leslie Nowland Hunter Valley Team

Leslie Nowland joined the Muswellbrook District Headquarters Brigade in 1946. He was actively involved in firefighting activity and civil defence duties including involvement in the 1955 major flood emergency in the Upper Hunter Valley. In 1992 that brigade was renamed as the Muswellbrook Communications/ Support Brigade in which Leslie is still a member. Leslie has held many positions including Captain for eight years, Senior Deputy, Deputy Captain, Brigade President and Secretary. In all aspects of brigade involvement he has shown dedication, commitment and loyalty. His thoroughness and expertise, particularly in radio communications, record keeping and attention to detail is truly remarkable. Leslie's knowledge of the local and surrounding areas and past fire history has been instrumental in assisting incident management personal in preparing plans and forecasting potential issues when major fires break out. Leslie has dedicated 69 years to the NSW RFS and is a respected, committed, valuable member



Group Captain William Pownell Namoi-Gwydir Team

William Pownall joined the Wallah Brigade in 1963 and has remained an active member of this brigade throughout his 52 years of service. For 22 years, from 1983 until 2005 Mr Pownall was Captain of Wallah Brigade and in this time was involved in all aspects from attending incidents to issuing permits. In 1999 Mr Pownall was elected Group Captain, a position which he still holds today. In this role Mr Pownall is active in all aspects of the Service, from attending incidents as Incident Controller and Divisional Commander, to attending Service Level Agreement meetings and Senior Management Team meetings. Mr Pownall also regularly assists with training and has chaired the Narrabri/ Moree Bush Fire Management Committee for numerous years. In 2006 while employed as a temporary Operations Support Officer, he conducted an extensive overhaul of the Narrabri Tanker fleet, a role he still assists with as required.



Colin Smeeth

Captain Colin Smeeth MIA Zone

Colin Smeeth joined the Wyangan Brigade in 1967, and has been Captain and Group Captain since 1996. Colin shows a positive and practical attitude to all roles he undertakes. Colin is on the Senior Management Team, Bush Fire Management Committee and the Liaison Committee for the MIA District and has been since 1996. He has led many taskforces to out-of-area fires; with the most recent being the January 2015 fires in Victoria. Colin is very much a lead-by-example volunteer. He is extremely active on the fireground, going out to investigate fires at all times of the day or night. Colin imparts his knowledge and skills by assisting in the MIA District Training Group particularly with the Crew Leader and Group Leader courses. He is a supportive mentor to volunteers from all areas and happily imparts his extensive knowledge of firefighting.

Queen's Birthday 2015



Edgar (Pat) Bradley

Group Captain Edgar (Pat) Bradley New England Zone

Pat Bradley joined the Hillgrove Brigade on 13 July 1998 where he was an active, dedicated firefighter. In June 2003, Pat joined the Armidale Headquarters (later Dumaresq) Brigade as a Deputy Captain. In July 2006, Pat was elected a Group Captain, within the New England Zone, a position which he holds today. Pat's passion and natural leadership qualities have seen him progress through the field officer ranks during his time in the NSW RFS. As a firefighter, field officer and Group Officer Pat is exceptionally highly regarded for his strong work ethic, his commitment to the NSW RFS, sound decision making on the fireground and his dedication, particularly notable in the training area and as a leader at fires. His skills at structure fires and at motor vehicle accidents are highly regarded by his peers. If not at the fireground Pat is usually in the Incident Management Team contributing his local knowledge in either the operations of control streams



Group Captain Trevor Fletcher Far South Coast

Trevor Fletcher joined the Batemans Bay Brigade in 1974. He has held a range of ranked positions and today is the Eurobodalla Group Officer North. Trevor has made constant and significant contribution to the overall management and promotion of the NSW RFS within the Eurobodalla District and across the State including his dedication to the Eurobodalla **Bush Fire Management** Committee and the Rural Fire Service Association. Trevor has been the essence of the NSW RFS within the Eurobodalla. He has mentored, trained, guided, consoled and supported many volunteers and staff over his 40 years of service. He has built and nurtured valuable relationships and networks within the Eurobodalla community emergency services sector. Trevor is to be commended for his exemplary service, his loyalty and commitment to the NSW RFS. Eurobodalla volunteers and the Eurobodalla community.



Firefighter Franklyn (John) Matters Southern Highlands Team

John Matters has been a volunteer member of the NSW RFS since 1950. He has been the driving force behind many improvements to the training and safety of his fellow volunteers not only within the brigade, but at District and State levels. During the 2001 Black Christmas fires John's leadership, skills and tireless work ethic became legendary in the District. His leadership and local knowledge enabled the local crews and Victorian Strike Teams to preserve all of the properties that came under threat. On every deployment John's commitment to his crew and the ease of leadership has resulted in local FCO's and Group Officers praising the crews from Wingecarribee for their professionalism and willingness to complete their tasks. He is a true Christian Gentleman... a true Australian that we all can be proud of.

ABOVE: Photo courtesy of The Southern Highland News

AUSTRALIAN FIRE SERVICE MEDAL RECIPIENTS CONT.





Elaine Robinson

Deputy Captain Elaine Robinson Cudgegong

Elaine Robinson has made a significant contribution to the Cudgegong District in the areas of operations, training, management and support. Her dedication is second to none. She is a Deputy Captain with many years experience and can be relied upon to look after vehicles, personnel and a fire sector without a second thought from the Incident Controller. She is a steadfast member of the firefighting team and demonstrates great stamina and skill. She leads her teams with dexterity, skill, forward thinking and with an eye on the end goal. As the first female Group Leader in this district she has offered her time and expertise to the whole range of NSW RFS activities apart from firefighting including first aid training, Bush Firefighter training, catering and in the support of juniors. Elaine has a special talent to lift brigade morale to a high level with her involvement in social gatherings and such things as role as the Christmas 'Elf' helping Santa distribute Santa bags to the local children. Elaine's commitment brings credit to the NSW RFS at all levels.



Brian Ryan

Group Captain Brian Ryan South West Slopes

Brian Ryan has been a member of the NSW RFS since joining the Frampton Brigade in 1970 at age 14. He has held the position of Frampton Brigade Captain for ten years before being elected to the position of Group Captain in the Cootamundra Shire in 1997, a position he continues to hold. Brian has exhibited outstanding leadership qualities in his role as Group Captain always leading by example and providing sound operational advice to members. He was a Divisional Commander during several major incidents including the Brawlin Springs, Jindalee Straight, Wallendbeen and Junee Fires. Brian's calm and decisive fireground leadership is highly respected by his peers. His ability to quickly analyse a situation, develop situational awareness and give sound operational direction continues to inspire his fellow firefighters with the confidence. Brian has also worked over many years to help build the modern fleet of tankers and equipment that the South West Slopes Zone has today.



Rudy Schuett

Firefighter Rudy Schuett Mid North Coast

Rudy joined the NSW RFS as a volunteer member of the Moonee Brigade in August 1995 and has served with dedication and distinction during the course of his 20 years of service. He is a passionate and dedicated brigade member of a highly active brigade, and has been the voluntary Operational Support Officer for the last 10 years providing a vital service to all the brigades and volunteers across the Mid North Coast Team. As a firefighter, Rudy has been involved in the majority of significant bush fire campaigns that have affected NSW, ACT and Victoria over the past 20 years. He has also attended hundreds of incidents across the area. One of Rudy's greatest attributes is his ability to encourage and maintain strong teamwork amongst diverse groups. No job is too large or too complicated for Rudy and he works with dedication and enthusiasm. Combined with his easy-going nature and wonderful sense of humour, Rudy is a highly respected volunteer.

ABOVE: Photo by Gemima Harvey, courtesy of The Coffs Coast Advocate

BRIGADE IN PROFILE

Yarrahappini/Stuarts Point

Name of Brigade: Yarrahappini/Stuarts Point Year brigade formed: 22 September 1953 Current Captain: Darren Rogers Current President: Ian Tolson D/T/Z: Lower North Coast



Can you give us a brief history of your brigade?

The first brigade meeting was held at the Stuarts Point Community Hall on 22 September 1953. The primary purpose of the brigade was to protect the banana plantations on Yarrahappini Mountain. Many of the growers lived at nearby Stuarts Point and had no equipment to deal with such fires. Banana plants have many dead leaves either hanging or on the ground, and the previous year one of the plantations had been severely burned.

What type of area do you cover?

Our area covers the beach to the mountain, including the holiday and fishing village of Stuarts Point, to farmland, bush and banana plantations and a variety of fruit orchards, as well as a 10 kilometre stretch of the Pacific Highway. Along with the banana plantations, the surrounding area consists of highly vulnerable coastal heath and tea tree wetlands.

What kind of equipment and vehicles do you have?

At first, our only equipment was leather beaters and

knapsacks. Our entire PPE consisted of a white helmet. In 1954 we were able to locate a 500 gallon tank and pump unit. It was stored in a packing shed on the Yarrahappini Mountain and in the case of a fire, we would skid it on to the first private truck that was available. This was our only firefighting vehicle until 1961.

Our first shed was built in Rogers Lane, Yarrahappini on land donated to the brigade by Les Rogers who was a founding member of the brigade. It was single bay with dirt floor and was within two kilometres of the



ABOVE: In April 1999 a boat carrying 60 asylum seekers from South China ran onto the beach at Scotts Head just north of the Yarrahappini/Stuarts Point Brigade area. The brigade was called in to transfer fuel from the boat. OPPOSITE PAGE: Yarrahappini/Stuarts Point members at the 60th Anniversary celebrations held in August 2013

banana plantations and three kilometres from Stuarts Point. The tank and pump unit were kept there until 1961 when we received our first fire truck, an ex-Army Ford Blitz straight from the army. Unfortunately our shed was so small that when the truck was garaged the doors could not be closed!

In 1966 a bigger tank and pump unit were fitted. In 1970 a new double bay shed was built with roller doors and concrete floor. A Studebaker 6x6 was then allocated as our main tanker. In 1981 a double bay shed was built in Stuarts Point and a single bay shed built by two local volunteers at Fishermans Reach, which is south from Stuarts Point. Our brigade then had three stations.

Around this time we were also able to purchase white overalls - but they were not popular. It wasn't until 1985 that we were issued with the 'yellows'.

Up to 1996 we had a succession of second-hand tankers from other brigades and the Forestry. We received our first brand new Isuzu Cat 1 tanker.

On 1 September 2001 the extensions to the Stuarts Point shed were completed, including a meeting room,

toilet and kitchen. In 2003 we received our second new tanker. Extensions soon commenced on the Rogers Lane, Yarrahappini station to accommodate the new Cat 1.

On the night of 22 September 2003 we held a 50th Anniversary dinner dance at the Stuarts Point Workers Club after special events at the fire station all day where the Commissioner Mr Phil Koperberg officiated.

In 2006 we received our third brand new vehicle, a Cat 7 Mitsubishi tanker having to sadly say goodbye some 'old faithfuls'. In 2009 with three fire stations and five firefighting vehicles, we closed the Fishermans Reach station and maintained two fire stations and four tankers.

On the 15 September 2013 we held a 60th Anniversary party by way of a BBQ. We were presented with a 60th Anniversary plaque by the Lower North Coast Zone Manager, Lachlann Ison on behalf of the Commissioner Shane Fitzsimmons.

What vehicles do you have currently?

At the moment we have a

Toyota Cat 9 and an Isuzu Cat 2 at the Yarrahappini Station, and an Isuzu Cat 1 and Mitsubishi Cat 7 at the Stuarts Point Station.

What are some unique achievements of your brigade?

After winning many local zone competitions over the years, the greatest win was at the Region North Exercise in Glen Innes in 2011 when our brigade was dubbed Best Performing Brigade.

What types of incidents does your brigade attend?

We do everything from picking up chemical drums off the beach, burning drug plants in an inaccessible part of the Yarrahappini Mountain on the Police Force's behalf, to bush and grass fires, vehicle and structure fires, flood clean-ups and helping the paramedics carry patients down stairs from a two-story dwelling to the ambulance.

A rare incident was the transfer of fuel from a refugee boat which had run aground at Scotts Head in the neighboring shire in 1991. It turned out we had the best tanker to do the job. Another very rare incident was a fire on the XPT train which started just north of Eungai Station. We were there waiting with ladders and charged 38's, however it self-extinguished just prior to arrival. After a thorough search of the engine we gave the driver the all clear to proceed on to Sydney.

What type of training do you do?

The Stuarts Point station backs onto a big oval so we do the practical training out back on the oval and use the training room for other aspects of training.

What community events do you participate in?

Every ANZAC Day we participate in the march down the main street to the Stuarts Point Cenotaph. We are also active at the bi-annual Yarrahappini Festival held in Stuarts Point. We have an annual water hydrant check each May and participate in the annual Clean Up Australia Day. Once a year Community Engagement teams visit the local schools as well as visit fire prone homes in the area.

Written By Darren and Eric Rogers

NSW RFS State Training

Month	Date	Program	Location	Contact
April	2 - 3	Community Liaison Officer (CLO) - Course	Casino	CommEng
	5 - 6	Multi Agency Leadership Program	Bankstown SES	L&D
8 - 10		Advanced Structural Firefighting Workshop (ASF) Localised workshop	Hunter Valley	L&D
	16	Operate in Remote Environments (ORE) - Assessment	Southern Tablelands	RAFSO
	19 - 21	Prescribed Burning Planner (PBP) - Course	Taree	CommPlan
	29 - 1	Rural Fire Instructor Course (RFI) 01/16 Part 1 of 2	Lidcombe	L&D
	29 - 1	Operate in Remote Environments (ORE) - Course	Central Coast/Hunter	RAFSO
	30	Aviation Communication and Evaluation (ACE) - Workshop	Cooma	Aviation
Мау	3 - 4	Multi Agency Leadership Program	Nowra	L&D
	5 - 8	Monitor Brigade Safety (SAF) - Course	Cumberland	L&D
	13 - 15	Rural Fire Instructor Course (RFI) 01/16 Part 2 of 2	Lidcombe	L&D
	13 - 15	Aviation Radio Operator (ARO) - Course	Goulburn	Aviation
	13 - 15	Air Base Operator (ABO) - Course	Goulburn	Aviation
	20 - 22	Advanced Structural Firefighting Workshop (ASF) Localised workshop	Lake Macquarie	L&D
	14 - 15	Remote Area First Aid (RAFA) - Course	Port Macquarie	RAFSO
	28	Operate in Remote Environments (ORE) - Assessment	Central Coast/Hunter	RAFSO
June	3 - 5	Advanced Structural Firefighting Workshop (ASF) Localised workshop	Lake Macquarie	L&D
	4 - 5	Community Safety Facilitator (CSF) - Course	Cumberland	CommEng
	7 - 8	Multi Agency Leadership Program	Batemans Bay	L&D
	17 - 19	Advanced Structural Firefighting Workshop (ASF) Localised workshop	ACT	L&D
	18 - 19	Remote Area First Aid (RAFA) - Course	Goulburn	RAFSO
	20 - 24	Air Observer (AOB) - Course	Mudgee	Aviation
	24 - 26	Advanced Structural Firefighting Workshop (ASF) Localised workshop	Orange	L&D
July	1-3	Leading People facilitator training course (LDP)	Armidale	L&D
	2	Aviation Communication and Evaluation (ACE) - Workshop	Casino	Aviation
	9 - 10	Safety Advisor (SAA) - Course	Lithgow	L&D
	15 - 17	Leading People facilitator training course (LDP)	Cumberland	L&D
	21 - 22	Incendiary Operations Supervisor (AIN)	Mudgee	Aviation
	22 - 24	Aviation Radio Operator (ARO) - Course	Coffs Harbour	Aviation
	22 - 24	Air Base Operator (ABO) - Course	Coffs Harbour	Aviation
	23 - 24	Rural Fire Instructor Course (RFI) 02/16 Part 1 of 2	Lake George	L&D

Calendar

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NSW RFS State Training Calendar

Month	Date	Program	Location	Contact
	11	Helicopter Insertion Techniques (HIT) - Recertification	Glenbrook	RAFSO
	11	Helicopter Insertion Techniques (HIT) - Recertification	Cessnock	RAFSO
	17	Helicopter Insertion Techniques (HIT) - Recertification	Mudgee	RAFSO
	17	Helicopter Insertion Techniques (HIT) - Recertification	Cataract	RAFSO
	18	Helicopter Insertion Techniques (HIT) - Recertification	Taree	RAFSO
	18	Helicopter Insertion Techniques (HIT) - Recertification	Cataract	RAFSO
	23 - 25	Command, Control Communications (CCC) Part 2 of 2	Sutherland	L&D
	24	Helicopter Insertion Techniques (HIT) - Recertification	Glen Innes	RAFSO
	24	Helicopter Insertion Techniques (HIT) - Recertification	Wyong	RAFSO
	24 - 25	Rural Fire Instructor Course (RFI) 03/16 Part 2 of 2	Armidale	L&D
	23 - 25	Leading People facilitator training course (LDP)	Wagga	L&D
	25	Helicopter Insertion Techniques (HIT) - Recertification	Armidale	RAFSO
	25	Helicopter Insertion Techniques (HIT) - Recertification	Hornsby	RAFSO
October	4 - 5	Incendiary Operations Supervisor (AIN)	Canberra	Aviation
	15	Helicopter Insertion Techniques (HIT) - Recertification	Cataract	RAFSO
	15	Helicopter Insertion Techniques (HIT) - Recertification	Lake George	RAFSO
	15 - 16	Rural Fire Instructor Course (RFI) 04/16 Part 1 of 2	Dubbo	L&D
	16	Helicopter Insertion Techniques (HIT) - Recertification	Glenbrook	RAFSO
	16	Helicopter Insertion Techniques (HIT) - Recertification	Tumut	RAFSO
	22	Helicopter Insertion Techniques (HIT) - Recertification	Bega	RAFSO
	22 - 23	Fireground Communications Workshop (AF instructors)	Cumberland	L&D
	23	Rapid Aerial Response Team (RART) - Crew Leader	Wyong	RAFSO
	29	Rapid Aerial Response Team (RART) - Crew Leader	Lake George	RAFSO
	29 - 30	Rural Fire Instructor Course (RFI) 04/16 Part 2 of 2	Mudgee	L&D
November	5 - 6	Fireground Communications Workshop (AF instructors)	Wauchope	L&D
	8 - 9	Multi Agency Leadership Program	Sutherland	L&D
	19 - 20	Fireground Communications Workshop (AF instructors)	Maitland	L&D
December		Nil		

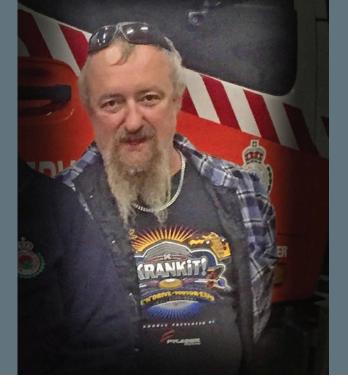
Notes:

- Dates and details for local level training programs are available from your training officer and/or Membership Services Officer.
- 2. Nominations for training programs can be submitted on-line via SAP.
- 3. Nominations close four weeks prior to the scheduled start date of the program.
- 4. Nominations for State Programs are to be submitted on-line via SAP. These nominations are subject to approval at the local and regional level before they are submitted to L&D, HQ.
- 5. Weekend CCC workshops and RFI courses listed as part 1 and part 2 must be attended as one course at the listed locations.

- 6. Dates and locations may change subject to venue availability.
- 7. Programs may be postponed and/or cancelled subject to nomination numbers and demand.
- 8. Localised courses refer to adjoining districts that will not require accommodation for the course or workshop

VALE Paul Sanderson (Sando)

Brigade: North Rothbury, Lower Hunter Zone Died: 26 November 2015



Paul Sanderson (Sando), Deputy Captain of North Rothbury Brigade, died on Thursday 26 November 2015 while fighting to protect Stanford Merthyr from a bush fire. The day after Sando's death, both the NSW RFS Commissioner Shane Fitzsimmons and North Rothbury Brigade offered tributes to him.

27 November 2015

It is with great sadness that I confirm the loss of a much loved and valued member of the Service overnight, with the death of a volunteer firefighter in the Hunter region.

Paul Sanderson, 48 years old, was working on the Stanford Fire at Stanford Merthyr near Kurri Kurri last night when he suffered a suspected heart attack.

His fellow brigade members and Fire & Rescue NSW immediately rendered first aid including the application of an Automated External Defibrillator and continued to provide care for him until an ambulance crew arrived a short time later.

Ambulance paramedics continued to treat Paul and he was transported by Ambulance to John Hunter Hospital but could not be revived.

Affectionately known by his brigade members as 'Sando', Paul was a Deputy Captain of the North Rothbury Brigade in the Lower Hunter Zone and had nearly 20 years experience with the Service. He was recently awarded life membership of the brigade in recognition of his commitment and dedication. The brigade has lost 'one of their best' and the close knit team are understandably struggling with the fire ground events and loss of Paul. Paul was a loving husband and father of two adult children and a grandfather of one. I spent some time last night with Paul's wife Deena, his children Lucy and George, their partners Damon and Brie, and grandson Jayden. They are obviously and understandably devastated but there is no doubt their love for Paul and each other will assist enormously during this awful time.

Deena recounted to me how yesterday started out like any other day, with Paul relaxing at home at North Rothbury before his pager went off just before dinner. Paul spoke to his wife who told him she had a bad feeling about the fire and didn't really want him to go. She gave him a kiss and a hug and told him to be careful.

Paul's crew told me that as a southerly change moved through the area last night, the fire increased in intensity and they were "absolutely flogged" and had to fall back to safety. As the crew re-gathered and filled their tankers, Paul collapsed and suffered what appears to have been a major heart attack.

Paul was immediately provided with the highest level of support and care, from his fellow crew, firefighters and paramedics. I was particularly impressed by the professionalism and compassion of the officers from the NSW Ambulance Service who not only tried their very best to bring Paul back but also the compassion and comfort extended to his family.

Incidents like this are a reminder of the dangers faced by our people volunteering in communities every day. It's also a reminder about the fragility of life and the importance of cherishing every moment with our loved ones.

The Service is providing care to Paul's family, our Lower Hunter Team and brigade members. Of course, our thoughts, prayers and condolences are with all of them during this very difficult time.

The Service, along with our FRNSW colleagues, are flying flags at half mast today as a mark of respect and in honour of Paul.

> Regards Shane Fitzsimmons NSW RFS Commissioner

North Rothbury Brigade released a statement the day after Sando's death

Sando spent 19 years volunteering his time with North Rothbury Rural Fire Brigade to keep our community safe. He was the main pillar of our brigade having been the longest serving member of the brigade with immense experience and knowledge. He stayed in the background but he was a leader. He was a gentle man who hated attention and limelight. He preferred to just get on with it and get the job done.

He had a passion for firefighting and managing our trucks. Our trucks and equipment were always ready to go thanks to Sando.

Sando was a teacher and mentor to all trainees and seasoned firefighters. He imparted his firefighting wisdom so that others could stay safe.

The members of North Rothbury Rural Fire Brigade recently voted in secret and surprised Paul with life membership to the brigade in recognition of his outstanding contribution. He just shook his head and we love him for that.

He was more than a colleague. He was a great mate to us all. Our brigade and community won't be the same without him.

Sando could not have done what he did for us all without the support of his loving wife Deena, whom he adored, and his kids, Lucy and George, who both grew up hanging around the fire station with their dad. Our hearts are broken for them and we will continue to look after them as they are an integral part of the North Rothbury Rural Fire Brigade family.

> Members of the North Rothbury Rural Fire Brigade

VALE Andrea Coleman

Brigade: Ku-ring-gai **Died:** August 2015 **Written by:** Captain Mark Unsworth, Ku-ring-gai Bush Fire Brigade



"Generous, feisty, committed... one of a kind!"

Andrea Coleman joined the Ku-ring-gai Brigade in May 2010 and very soon made an impact on the brigade and its members. She was our Assistant Training Officer for three years and from 2011 she was our brigade's Community Engagement Officer. It was in this role that she excelled. Whether it was organising street meetings for residents in bush fire prone areas, or teaching Year 9 students about the fundamentals of bush fires, her enthusiasm and dedication to the role was just amazing.

It is a terrible irony that in our April Brigade Committee Meeting, the following minute was recorded:

Andrea Coleman proposed that due to the increased focus on Community Engagement within the NSW RFS and within the brigade, a new Annual Award be introduced to recognise and acknowledge time spent on community engagement activities. This was agreed by the Committee and the new Community Engagement Award is to be introduced at next year's AGM.

The Ku-ring-gai Brigade has decided to call this the Andrea Coleman Award for Community Engagement. Andrea was my right hand woman and whether it was community engagement, or organising the annual Brigade Christmas Party, I knew all I had to do was to was to give her the job and forget about it. I knew that she would have it organised, more to the point she would have *us* organised and everything would go off without a hitch.

Andrea was loved and respected by all who knew her and some of the many comments that have been received in emails, SMS and on our brigade Facebook page, reflect the deep admiration so many of us had for her. I have selected a few that exemplify this:

"It is a very sad day in the NSW RFS family as we farewell inspirational firefighter Andrea. We will remember Andrea's kindness and fun spirit. We pay our deepest respects and send condolences to her family and her brigade. She was amazing."

Cowan Rural Fire Brigade

"Such a tragic loss. Andrea was such a beautiful person with the most joyous smile. Condolences to her family and to all her colleagues at the brigade."

Greg Rappo, Ku-ring-gai SES

"This news is devastating. My most heartfelt condolences to Andrea's family and the brigade. Her enthusiasm, compassion and dedication to community engagement in the bush fire world will be so sorely missed."

> Jennie Cramp, Ku-ring-gai Council

"Generous, feisty, committed, funny, bold, beautiful ... One of a kind!!! Your strength and commitment to the RFS family, community education and improvement in what we do, will live on as we remember you. Farewell Beautiful Lady."

> Patsy Marshall, Hornsby Fire Control Centre

We loved her, we miss her. Goodbye dear friend.

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

BUSH FIRE BULLETIN

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



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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