

# BUSHFIREbulletin

THE JOURNAL OF THE NSW RURAL FIRE SERVICE

//// VOL 29 No.03 // 2007

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on long weekend

Ten hour  
blizzard rescue

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your helmet?

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WorldFire



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# FOREWORD



I am very pleased to be writing this foreword in my new capacity as Commissioner of the NSW Rural Fire Service. It has only been a few weeks since my appointment and I am truly honoured to have been chosen to lead this great organisation.

Firstly, I'd like to thank all those who have sent messages of congratulations and support; they have all been sincerely appreciated. I have to fill some very big shoes, but I know that with your continued support and goodwill we can further the great achievements of the RFS and give the people of NSW the assistance and protection they deserve.

There are a number of very important challenges facing the Service. Uppermost is ensuring that you, our dedicated volunteers, get the level of support you need. This will continue to be achieved through the collective efforts of RFS staff and volunteers working towards developing the future direction of the organisation and building even better organisational capabilities with which to protect our valued communities.

Climate change is another major focus for us, with experts predicting longer and hotter summers and more frequent and intense fires. To help combat the implications of climate change and other issues causing fire activity, we need to keep looking at technology to help us. Over the past few years we have made major improvements to our appliances, personal protective equipment, mapping capabilities and online services. Having said this, we can't rest on our laurels and must keep looking for ways to use new innovations to boost our capabilities and improve protection for our crews.

The east coast lows and associated storms of June resulted in storm damage and major flooding to the Central Coast and Hunter areas and, as usual, our crews were out in the rain and wind helping repair damage where possible and assisting SES in affected areas. Our assistance, comprising more than 3,000 personnel, was very much appreciated by our colleagues at the SES and I want to take this opportunity to extend my thanks to all those who took part.

The efforts of the 200-plus RFS personnel who have supported the battle to mitigate the Equine Influenza outbreak has also been recognised by the other agencies involved. Our volunteers and staff have done a first-rate job across many areas, including: field operations, planning, logistics, mapping, community education, management support and media.

Over the next few weeks and months I look forward to meeting as many of you as possible so I can understand your thoughts on the Service and the projects we can undertake together.

Shane Fitzsimmons, AFSM  
Commissioner

# OUR VALUES UNDERPIN ALL OUR ACTIONS

# INCIDENTS

## RFS RESPONDS EN MASSE AS STORMS BATTER COAST ON LONG WEEKEND

Story by Inspector Ben Shepherd and Brad van Wely

Photos by: Clinton Down, Picton RFB, Inspector Shane Geerin, The Lakes Team and Dean Symons, Illawong RFB

**W**ith reports indicating the real possibility of severe weather impacting the east coast of NSW between Wollongong and Taree on Thursday 7 June 2007, emergency services agencies tuned in with anticipation for updates.

Minimal rain had fallen earlier in the week, but broadcast conditions were for severe winds and heavy rain forecast for Friday 8 June and the ensuing four days.

### 'SEVERE WINDS AND HEAVY RAIN FORECAST'

Early on Friday, the RFS began taking requests for assistance from the State Emergency Service (SES) as well as directly through the triple zero (000) network.

By 1200 hrs resources were deployed to Lake Macquarie, Wyong, Hunter Valley, Warrindah/Pittwater and Gosford.

By late afternoon crews had also been dispatched in other areas including the Blue Mountains, Port Stephens, Muswellbrook, Sutherland, Lithgow, Cessnock and Singleton.

The Operations Centre at Wyong, as well as the Region East Major Incident Coordination Team, was activated to manage requests for additional resources particularly within the Gosford, Wyong and Lake Macquarie Local Government Areas (LGA).

### Several agencies involved

Many agencies were brought in to assist SES and the RFS with the emergency including Police, Ambulance, Department of Health,





# HELPING WITH THE CENTRAL COAST CLEAN UP



with a multitude of tasks ranging from clearing fallen trees and tarping roofs to pumping operations and general clean up.

Some brigades were tasked with sand bagging duties, particularly along the Great Northern rail line at Maitland.

The RFS also assisted with many specialist areas of the incident management team, providing staff in such areas as planning, GIS, air operations, media liaison and logistics roles.

The use of aircraft for aerial reconnaissance was especially successful in assisting with photography, relocation of flood affected families (14 people in total) and assessment and delivery of logistical items to isolated communities.

A number of brigades also assisted with large-scale letter box drops containing safety information about hygiene and general safety relating to the recovery and clean up phase.

In conjunction with strike teams, there was also a local commitment of around 2,440 personnel deployed in areas stretching from Shoalhaven in the south to Lithgow in the west and Taree in the north.

### **'VOLUNTEERS GAVE UP THE FOUR-DAY HOLIDAY TO ASSIST COMMUNITIES'**

The Queen's Birthday long weekend plans of many volunteers were thrown into disarray as they gave up the three-day holiday to assist communities in need. Many RFS members even took additional time off work to complete the massive task of restoring order to townships across the eastern seaboard.

The RFS also assisted the SES with the provision of aviation resources in the



Telstra, DOCS, Wyong Shire Council, NSW Fire Brigades, Energy Australia and the Volunteer Rescue Association.

On Saturday at approximately 1920 hrs a strike team of six tankers was responded to Newcastle to assist SES with the evacuation of residents.



At 1000 hrs on Saturday the RFS had 113 appliances in the field with 487 personnel.

### **41 strike teams committed**

Over the following week the RFS committed 41 strike teams consisting of 263 appliances and around 1200 personnel into the worst affected areas of the Central Coast to assist



Hunter/Newcastle area. In total, ten aircraft were tasked to the flood relief operations and flew a total of 17.5 days during the operation.

In addition, five fixed-wing transport aircraft were utilised to move SES personnel from across the State to the Hunter location.

A total of five helicopters were utilised for winching operations, rescuing stranded residents and conducting fodder drops to livestock in isolated areas.

HeliFire, the RFS's new, award-winning airborne mapping system, (see Corporate News section - page 52) was also utilised to great effect to map the extent of the flood ravaged areas.

## 'RFS AIRCRAFT OFFICERS ASSISTED WITH THE MANAGEMENT OF THE AIRBASES IN OPERATION'

Additionally, the Service's aviation operations capabilities were utilised with a number of Air Observers deployed to gather flood intelligence for the SES while RFS Aircraft Officers assisted with the management of the airbases in operation.

The RFS commitment to the storms finished on the 15 June 2007 during which time the Service assisted with many of the 20,000 calls for help received.

A big thank you goes out to all RFS personnel who assisted during the floods. Many agencies, including the RFS and SES, have been inundated with emails and letters of thanks and support from members of the community who were assisted during the floods.



## BELFORD RFS RESPONDS TO A COLLEAGUE IN NEED

By Brad van Wely

Photos courtesy of the Shearer family

**O**n 8 June 2007, the Hunter River rose at a dramatic rate, bursting its banks at will and flooding low lying areas throughout the farming stronghold area of Singleton, west of Newcastle.

Across the course of the following 72 hours the Singleton area registered a record 250mm of rain.

For RFS Belford Brigade Captain and dairy farmer Glen Shearer, the torrential rain was far removed from previous days when the area had still been in the midst of the worst drought in the region's history.

### 'THE HUNTER RIVER WAS EXPECTED TO PEAK AT 13.5M IN SINGLETON'

As the downpour continued relentlessly through the night of Friday 8 June, Glen and his family began preparing for flooding following reports that the Hunter River was expected to peak at 13.5m in Singleton. The river would eventually reach 14.3m before the storms began to ease.

Eleven and half metres was the all important number for the Shearer's before the water level cut their property off from the main road.

### 'IT WAS TIME TO RELOCATE ALL 150 HEAD OF CATTLE'

Later in the day, water began to lap back and forth between their property and the river with nowhere to drain, signifying it was time to make the big decision to relocate all 150 head of cattle to higher ground.

As Glen, a firefighter for 47 years, and his family (most of whom are also members of the Brigade) began moving irrigation pumps to higher ground, he received an offer of assistance from one of his fellow RFS members.

### 'ALMOST A DOZEN BELFORD BRIGADE MEMBERS BEGAN ARRIVING AT THE SHEARER'S PROPERTY'

Much to Glen's surprise, within no time almost a dozen Belford Brigade members began arriving at the Shearer's property to lend the family a hand – many without even calling ahead to see if assistance was required.

"RFS members just know when help is needed," said Shearer. "One of the fellas just rang and asked are you going to move out and we said yes and the rest just turned up."

### Lending a helping hand

"Like all RFS members, they are a breed



of their own. We are very fortunate to have such good friends. RFS members are there to help people and they decided it was time to help me for a change."

The cattle were marched two kilometres up the road to higher ground. Expensive farm machinery, vital to the farm's operations, was also driven away from the rising waters.

Another important item of machinery moved during the relocation was the brigade's trusted Belford 1 appliance. The truck had resided on the Shearer's property since November last year when bad weather had damaged their station.

### Hay shed in danger of spontaneously combusting

Once the cattle and machinery were safe, attention turned to the Shearer's hay shed, which was in danger of spontaneously combusting due to the flood conditions. Numerous trucks and trailers were brought in and around 2,000 square and 150 bails of round hay were moved to friends' properties.

Remarkably, in 1955, floods in the area had seen water levels rise to over 17m. However, Glen said the support he received in June was unprecedented.

"It's not the first time we have had to move, but it was overwhelming to see that the support is still there as you usually expect to be helping someone else. A couple of other members were also experiencing flood issues at the same time and knew there was just as much to do at home, but I guess it just proves that what goes around comes around," said Glen.

### The clean up begins

By Tuesday 12 June, water levels had receded far enough that the cattle could be returned to the farm for milking, but the massive clean up was only just beginning.



Over the coming days, Belford Brigade members assisted with the major clean up and repair work required to the Shearer's farm. Kilometres of fencing were mended, while sheds and other infrastructure covered in a 20mm layer of mud were cleaned out. All the while, the Brigade's 40 members continued to assist the local community recover from the floods by assisting with letterbox drops, manning road blocks and clearing debris from affected properties.

"I would like to thank the RFS and in particular chaplain Ron Anderson and Hunter Valley Team Manager Michael Brett for their offers of additional assistance," said Glen. "The truth is I didn't need additional support because I had the best team working for me."

**From top:** The Shearer's property goes under  
Temporary milking yards  
Cleaning up the milking sheds

## ANEMBO BRIGADE JOINS TEN HOUR BLIZZARD RESCUE

Photos by Allan Lehepuu

**O**n Wednesday 27 June 2007, around 14 RFS personnel from the Anembo Brigade north of Cooma battled through a blizzard for almost ten hours to rescue a 24-year-old woman suffering an asthma attack.

A total of 29 people worked through the night to reach the woman, including personnel from NSW Police, NSW Ambulance Service and several private contractors.

The Ambulance Service's state major incident plan (AMPLAN), which is usually reserved for multi-victim emergencies, was employed for the operation.

Ambulance crews on sleds and RFS personnel with chainsaws worked through waist-deep snow to clear a path to the woman's isolated property in the Tinderry Mountains, located almost half an hour drive from Michelago, which had lost power at 0520 hrs that morning.

The first of three ambulances was sent from Cooma around five minutes after the triple zero (000) call came in at approximately 1800 hrs, but couldn't proceed very far as it was only a 2WD drive. Shortly after, the first of four RFS appliances joined four ambulance officers to clear trees and snow so thick that crews were slowed to a rate of just four kilometres an hour.

An ambulance helicopter couldn't be brought in due to the severe conditions. Fortunately, a number of RFS personnel were already working to clear roads in the area using a 4WD tractor with a dozer blade and the Deputy Captain's own 4WD, which was fitted with snow chains.

A second ambulance (4WD) was called from Cooma and was able to make it to the top of the Tinderry Mountains with snow chains on the front wheels, but not before having to use the electric winch 16 times to get to the top of the mountain only to then be stopped by fallen trees at the top.

Michelago brigade attempted to join the rescue at around 2100 hrs, but their 4WD Troop Carrier ran off the road in the snow more than 10km from the patient's house and they were unable to go on any further.

A private dozer was dispatched to assist in the clearance of large trees, some measuring up to 50m long, which still blocked the road after RFS crews ran out of fuel for their chainsaws.

"The roads were pretty much covered in snow. There were hundreds of trees. In two kilometres I probably cleared 50 trees. That took about two hours," said Deputy Captain of the Anembo Brigade, Matthew Mill.

Just after 2200 hrs, two snowmobiles were towed in behind the back of another ambulance from Perisher Valley and were



used to negotiate the last eight kilometres of track to the house with several ambulance and police officers aboard.

The dozer from Bredbo, 20km north of Cooma, was escorted up the mountain by the Cat 7 tanker from Colinton Brigade.

At 2230 hrs the dozer extracted Michelago's troop carrier which was bogged deep in snow. At around midnight, the last remaining tree separating crews from the house was cut and the dozer arrived to clear it from the road.

A skidoo with two ambulance officers

aboard then travelled the rest of the way to the property with the assistance of a 4WD carrying additional medical equipment.

With no power and no road visible, rescuers were unable to locate the patient's house until approximately 0130 hrs in the white out conditions.

The 4WD ambulance arrived at approximately 0200 hrs and reached the bottom of the mountain with the patient at around 0400 hrs. The patient was then transferred to Canberra Hospital by 2WD ambulance in a stable condition.

## TWEED FIRES SIGNAL START OF FIRE SEASON IN THE NORTH

Story by Inspector Laurence McCoy,  
Far North Coast Team  
Photos by Ron Duckworth and  
Inspector Laurence McCoy

### Zara Road Fire

**T**he Zara Road fire at Chillingham, west of Murwillumbah in the State's north, kicked off the 2007-08 fire season early.

The escaped burn started just south of Chillingham Village and ran into steep, inaccessible country on Thursday 5 July, burning approximately 337ha. It was a sobering start to the fire season with the fire danger index reaching the very high figure of 40 at 0900 hrs on the day the fire started.

### 'A NUMBER OF LOCAL BANANA PLANTATIONS WERE DAMAGED'

Crews from the Tweed District did extremely well to contain the fire in three days, although due to extremely dry conditions the fire was patrolled for a further ten days. No structures were damaged in the fire, although a number of local banana plantations were damaged and isolated rural properties were at times threatened by fires flaring in the well cured 'Molasses Grass', which is notorious locally.

In total, eight of the Tweed's nine brigades attended the fire. A dozer and a light helicopter were also used to suppress the fire before it was declared out on Monday 16 July.

### Gumboot Fire

Saturday 28 July was no different to previous weekends as brigades waited with anticipation for the local Bush Fire Danger Period to commence the following week. Unfortunately three significant fires occurred on this day.

The most significant of these fires escaped in Gumboot Valley, just south of Uki. The fire burnt into inaccessible, steep, country and it took RFS and National Parks and Wildlife Service (NPWS) crews seven days to contain.

### 'CAREFUL PLANNING OF CONTROL LINES AND QUICK ACTION TAKEN BY TWEED COUNCIL PREVENTED MAJOR IMPACT'

Although no dwellings were damaged, as with previous fires, a number of rural properties were threatened. Parts of the Tweed around the Clarrie Hall Dam Catchment were damaged by the fire, but careful planning of control lines and quick action taken by Tweed Council prevented major impact.



In the steep terrain the fire was difficult to control. On Sunday 29 July, the fire spotted across the Gilwah Trail. Ground crews with the assistance of water bombing and a dozer were able to control the spot and prevent further damage to the Catchment.

The fire burnt approximately 620ha of bushland on Council property, private land and part of the Mount Jerusalem National Park, involving more than 145 firefighting personnel from RFS and NPWS.

Despite the high fire activity, 18 local crews from throughout the Far North Coast Team helped with the firefighting effort. As with the Zara Road fire, dry conditions meant that the fire continued to be patrolled for a further ten days before being declared out.

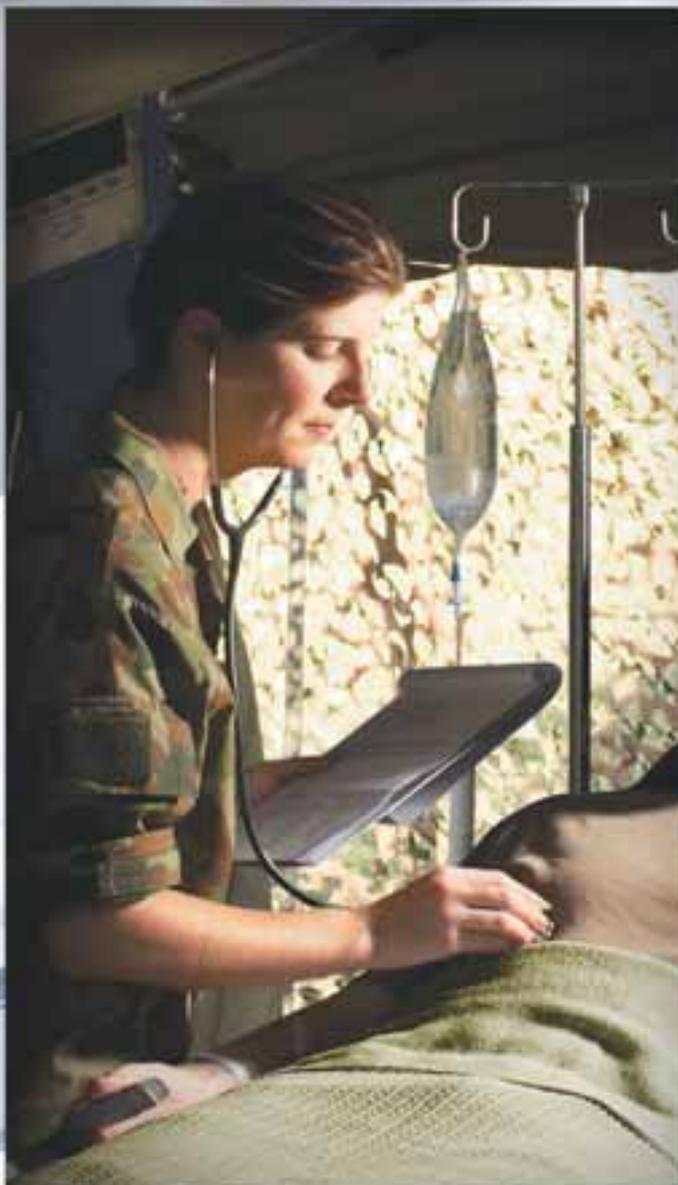
### Wabba Road Fire

On the Sunday 5 August a fire broke out and burnt into the Mooball National Park at Burringbar. RFS and NPWS crews worked in difficult terrain for three days to contain the fire which threatened rural properties, banana plantations and the Mooball National Park. A dozer and helicopter were also used to help contain the fire which burnt approximately 70ha. With no end in sight from the dry conditions, crews patrolled the fire for another week until it was eventually declared out.

### 'A DOZER AND HELICOPTER WERE USED TO HELP CONTAIN THE FIRE WHICH BURNT APPROXIMATELY 70HA'

Dry conditions have eased with good rains falling over the three Local Government Areas of Ballina, Byron and Tweed, however follow up rain will be needed to reduce the threat of fire this summer.





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**AUSTRALIA'S RESERVE FORCES**

## BUSH FIRE DANGER PERIOD RIGHT ON TIME FOR NEW ENGLAND ZONE

Story by Inspector Ivan Perkins,  
New England Zone

Photos by Josh Simpson, Dumaresq RFB

**T**he Bush Fire Danger Period in the New England region starts two months earlier than most other areas in NSW every year due to the traditional August winds that blow across the tablelands and blow they did this year following the 1 August period commencing.

### Friday 3 August

The New England Zone was notified of an escaped private burn that had entered the Guy Fawkes National Park, south-west of Grafton, and was fanned by winds gusting up to 67km/h from the west-north-west. On the back of one of the coldest winters in some time, conditions were conducive for significant fire activity in the area.

First reports indicated that the Pargo Creek fire had burnt in excess of 880ha. Close liaison between National Parks and Wildlife Service (NPWS), RFS and private land holders to determine containment strategies soon followed. Given the remote and difficult terrain the fire was burning in, containment options were identified using the Sara River to the west and north, Pargo Creek to the east and the Nowlands Trail to the south. Aerial reconnaissance was done daily with local RFS and NPWS ground crews conducting patrols.

### Monday 6 August

The Pargo Creek fire was predicted to ease in intensity as it burnt into lower fuel loads in conjunction with the prediction of cooler temperatures. RFS and NPWS crews continued to patrol and black out as necessary.

NPWS reported two more fires - the Spear Creek fire was burning uncontained in the vicinity of West Kunderang near Spear Creek on private land and was threatening large amounts of the Oxley Wild Rivers National Park.

Meanwhile, the Dyke River fire in the Five Day Creek area had already burnt over 300ha of private land and 250ha of the world heritage area of New England National Park.

### Tuesday 7 August

The Pargo Creek fire had now burnt 1530ha and continued to burn within containment lines.

The Spear Creek fire had burnt over 100ha, containment lines were identified, using Spear Creek to the south and east, Macleay River to the north and the West Kunderang fire trail to the west. A hazard reduction burn that NPWS had planned for later in the year was conducted along the West Kunderang fire trail to strengthen containment to the west and south.



NPWS crews worked with a bulldozer to construct containment lines around the Dyke River fire.

### Wednesday 8 August

The next 24 hours would be crucial as significant natural heritage was at threat if the fire broke containment as the Pargo Creek fire reached the eastern containment line of Pargo Creek.

Crews were put on standby to conduct a 10km backburn along the next eastern containment line at Paddy's Land Ridge Road as a fall back strategy.

RFS crews from Armidale, Tenterden and Tingha assisted NPWS with backburning operations on the Spear Creek fire. Due to the remote terrain, RFS crews camped out overnight along with NPWS crews.

Aerial reconnaissance and construction of containment lines continued on the Dyke River fire which had now burnt 630ha.

### Thursday 9 August

The Pargo Creek fire was now contained to the east and required regular patrolling. The only active fire remaining was on the southern and northern edges. A closer containment line to the south was identified using Oaky Creek. RFS crews from Armidale, Guyra and Wards Mistake conducted a backburn in the area and successfully

managed to contain all edges of the fire. By this stage the fire had burnt 2667ha.

The Spear Creek fire backburning operations were successful in containing the fire on the western and southern edges. Ground crews were confident that the fire would not breach any containment lines at this stage given current and forecast conditions.

Containment lines had been completed around the Dyke River fire with NPWS crews closely monitoring the fire from the ground as aerial observations had been hindered by smoke in the valleys and gorges.

### Tuesday 14 – Monday 20 August

Milder conditions allowed ground crews to attend other fires with aerial reconnaissance continuing daily. The Pargo Creek fire was declared out after burning in excess of 3200ha.

The Dyke River fire had been held within containment lines with milder conditions and rain easing any threats. The fire was declared out at 1400 hrs after burning 2150ha.

Significant rainfall in the area extinguished the small pockets of fire left burning within containment lines, resulting in the Spear Creek fire being declared out at 1000 hrs having burnt 1200ha.

## STRUCTURE FIRE WYONG DISTRICT 15 AUGUST 2007

Story and photos by Inspector Shane Geerin,  
The Lakes Team

**A**t 0119 hrs on Wednesday 15 August 2007, Wyong District (after hours) received a call to a house alight at South Tacoma, north of Gosford. RFS brigades from Chittaway, Berkeley Vale, Warnervale, plus several Group Officers, Duty Officers and Salvage were all responded along with a NSW Fire Brigade unit from Wyong.

Upon arrival at 0133 hrs, Chittaway 1 and Group 6 reported that the house was well involved in fire, with reports suggesting an occupant was still inside the dwelling. RFS and NSW Fire Brigades (who arrived just prior to RFS crews) donned breathing apparatus, but could only fight the fire defensively due to the intensity of the flames.

### 'A 22-YEAR-OLD MALE WAS STILL MISSING'

The first situation report (sitrep) confirmed that three people had been accounted for, while a 22-year-old male was still missing, believed trapped in a first floor bedroom at the rear of the house.

The first floor of the two-storey, tin roof, hardiplank house could only be accessed from inside the dwelling.

With excessive heat continuing to hamper fire crews' ability to gain access to the structure, the focus was on protecting the exposures with adjoining residences in close proximity and attacking the flames within the dwelling through any penetration accessible.

Power lines servicing the house ran above the main driveway and Energy Australia was requested urgently as the lines began arcing, causing issues for crews attempting to access the front of the structure. At 0348 hrs, Energy Australia isolated power to the immediate site, giving crews the opportunity to cool down a number of previously inaccessible hot areas.

The inside of the dwelling contained large amounts of paper storage, with crews unable to access the internals of the house due to the possibility of collapse.

### Asbestos contamination a major concern

The house was identified as containing asbestos and crews were forced to comply with stringent guidelines during the decontamination process. No firefighter that was exposed to the hot zone established around the immediate vicinity was allowed to board their respective fire trucks for fear of contamination. All PPE on the foreground was removed from firefighters before leaving the scene. This equipment was then bagged, with new PPE delivered to the site to enable crews to proceed back to their respective stations.



The fire was contained at around 0500 hrs, while crews continued to apply water to hotspots. Due to excessive damage to the structure, the decision was made to bring in Urban Search and Rescue (USAR) from Sydney to shore up the internals to allow accessibility to conduct a full search for the possible occupant.

At around 0740 hrs the missing male was discovered in the first storey rear bedroom. USAR arrived at 0830 hrs and began securing the internals of the structure.

RFS transport vehicles and Salvage were seconded to assist with USAR equipment as the agency's truck was unable to drive under a low bridge near the incident.

Police crime scene officers gained access to the dwelling at 1130 hrs once USAR had



given approval to enter and access was made to the victim. The fire was totally blacked out at around 1220 hrs. RFS crews finished mopping up at the incident at 1300 hrs.

## STRUCTURE FIRE COOMBA PARK, GREAT LAKES DISTRICT 21 JUNE 2007

Story by Bob Manners, Coomba Park  
Brigade Captain  
Photos by David Williams, Dianne Green  
and Bob Manners

**A**t around 1930 hrs on Thursday 21 June 2007, RFS pagers in the isolated community of Coomba Park alerted personnel to the region's first structure fire in recent memory.

### A first for Coomba Park

Coomba Park is a quiet place on the western shores of Wallis Lake near Forster where little happens - a place where there is community spirit in abundance. This in turn helps support an active local fire brigade. The brigade is not only responsible for protecting the community from bushfires, but also for the protection of over 350 occupied and unoccupied homes - many with sheds and outbuildings. There is also a smattering of commercial premises spread indiscriminately around the area.

### 'NEIGHBOURS AND ONLOOKERS WERE VOLUNTEERING INFORMATION ABOUT THE FIRE'

First to respond on 21 June was Coomba 1, arriving on scene 1.5 km from the station at approximately 1945 hrs, with Coomba 2 arriving around two minutes later. While the initial crews were setting up, neighbours and onlookers were volunteering information about the fire - the dog rescued from the back verandah, a broken front door lock, what appeared to be multiple ignition points, and the fact that the owners were currently away.

### House, shed and cruiser alight

Fire crews noted that a two-storey house, a large timber shed located 8m away, and a 7.2m cabin cruiser situated 3m from the northern end of the house were all fully involved with fire. This in itself seemed strange, as the fire's progression appeared too spontaneous. With backup requested, a defensive strategy was put into action. Coomba Park has no reticulated water so as a first priority portable pumps were set up to water tanks at two neighbouring properties to replenish the initial appliances working on scene. Several 38mm hose lines were deployed from Coomba 1 to protect an adjoining property to the rear, with a further two set up from Coomba 2 at the northern end of the house, where a 45kg LPG gas bottle was venting and under immediate threat.

### 'A 45KG LPG GAS BOTTLE WAS VENTING AND UNDER IMMEDIATE THREAT'



Meanwhile, 25km away members of Pacific Palms, the closest neighbouring brigade, were in station conducting a meeting. When they were paged, one of the fastest time outs on record was recorded, with Palms 10 arriving on scene around 1955 hrs and Palms 1 shortly after. Having to travel almost 50km Tuncurry 1 arrived a little later, shortly after police and ambulance.

### CABA crew deployed

Initially the CABA crew was unable to perform a primary search as both structures had collapsed and the site was too hot. They were later deployed to dismantle and remove the roofing materials to give better access to the seat of the fire. During this time, Palms 1 and Tuncurry 1 ran water shuttle from Coomba Station. Eventually the CABA teams were able to conduct a primary search when the remains of both structures were cooler and accessible. A secondary search was completed soon after. The ambulance

crew, which was there as a precaution, was released at around 2300 hrs and the site handed over to local police and cordoned off.

### Investigators and K9 Unit arrive

The following day forensic investigators from NSW Police and the RFS scoured the scene and surrounding areas, while local detectives from Taree interviewed a number of persons of interest. During the evening the NSWFB K9 Unit arrived, with the local brigade recalled to supply a generator and lighting to continue the investigation. At around 1900 hrs the scene was handed back to the RFS to cool a few recurring hot spots. The incident finally concluded at around 1945 hrs on Friday 22 June.

The fire resulted in the total loss of a house, shed and large boat, the boat having been dry-docked on the adjoining allotment for a refit.

# SPOTFIRE!

## A TRUCK ROLLOVER WITH A DIFFERENCE – CREWS JUMPSTART A HELICOPTER

Story by Inspector Andrew Luke,  
Community Safety Officer  
Liverpool Range Zone  
Photos by Captain Geoff Eyre,  
NSWFB - Merriwa

### THE DRIVER OF THE TRUCK WAS UNABLE TO BE LOCATED AT THE SCENE

At 0028hrs on 26 May 2007, Liverpool Range Zone received a triple zero (000) emergency call reporting a truck rollover on the Golden Highway, west of Merriwa. Upon arrival at the scene, crews were greeted by a fertiliser truck on its side leaking diesel. The driver of the truck was unable to be located at the scene, prompting a ground and air search.

Crews from the Merriwa River RFB, NSW Fire Brigades, Merriwa and District Volunteer Rescue Association (VRA), Ambulance Service, Police and Upper Hunter Shire Council staff attended the incident scene and worked with the Westpac Rescue Helicopter in an attempt to locate the driver.

All agencies worked well together in cold, difficult conditions, and after the search was called off, the Westpac rescue helicopter was to be released from the scene.

### RESCUE HELICOPTER WAS SUCCESSFULLY JUMP STARTED BY THE MERRIWA RIVER RFB CAT 1

The intense cold not only made for difficult work conditions for crews, but also resulted in battery and associated starting problems for the rescue helicopter. Crews once again worked closely together and through combining advice and expertise from the Westpac crew, VRA, Ambulance Service and RFS, the Rescue Helicopter was successfully jump started by the Merriwa River RFB Cat 1.

Crews continued to work on the scene throughout the night for over seven hours while salvage was undertaken.

The driver of the truck was found safe the next morning.

#### From top:

It took crews several hours to remove the fertiliser bags

The stricken truck on its side leaking diesel

The Westpac rescue helicopter receives a jump start from a Cat 1 tanker



# SPOTLIGHT ON VOLUNTEERS

## OFFICER IN PROFILE DAVID LANG

**GROUP CAPTAIN  
WAKOOL BRIGADE,  
MID MURRAY ZONE  
25 YEARS OF SERVICE**

### How did you get involved in the Service?

I got involved in the service when I started share farming with my father-in-law. Being in a small community you didn't get much choice – you just helped out at a fire.

### Can you give us a history of your progression through the Service?

I joined in 1982 and wasn't that involved until 2000 when I was elected secretary/ treasurer, taking over from a member that had done the job for 50 years (Jim McConnell), so I have a few years to go to match his service.

### 'I WAS SHAKING WITH THE THOUGHT OF WHAT WE HAD JUST DONE'

I became a Deputy Captain in 2000, was appointed Deputy Group Captain in 2004 and Group Captain in 2006 when the Group Captain at the time, Lindsay Lashbrook, took up a position with the RFS in Tumut.

### What has been your most memorable moment in the Service?

The moment I won't forget was going to the fires in Moruya and following the local brigade up a goat track to deliver some water for a helicopter.

After getting out of the truck I was shaking with the thought of what we had just done - taking a truck up a track so steep and narrow, but the locals just laughed at me. Not a good experience for a boy from the flat country.

### What has been your worst fire and why?

My worst fire was a local fire in 1990. The speed of it crossing our paddock was amazing – it went over the top of a house with a family in it. We couldn't get to the house before the fire hit, but we could hear the family talking to us on the UHF and then we didn't hear anything for about five minutes. The house and family survived.

### What role do you see the Group Officers performing in mentoring less experienced officers?

I think that Group Officers should be mentoring the less experienced officers and making sure that skills and training are up to speed.

### 'WE'RE LOSING OUR MOST EXPERIENCED GROUP OFFICERS FOR VARIOUS REASONS'

We have a problem where we're losing our most experienced Group Officers for various reasons and that will leave gaps in that level of the service. Even with declining rural populations, we've still got to meet the challenge of maintaining our brigade numbers.

Group Captains also have to support local Brigade Captains to encourage people to be involved and to retain their interest and involvement with the Service.

### What is the strangest thing you have experienced at a fire?

The strangest experience I've had at a fire was in the hills at the Victorian fires in 2006 when the diesel froze in the trucks overnight.

### Have communication methods at fires changed since you entered the Service? If so how?

Communications at fires has improved, probably because we have so many different types of radios in vehicles which allow us to manage the fireground while keeping in touch with other emergency agencies involved with the same fire and also with Fire Comm. Our red gum forests still present problems as we lose communications in the bush.

### 'WE ARE A LOT BETTER EQUIPPED THAN 20 YEARS AGO'

### What piece of equipment could you not do without as a Group Officer?

The piece of equipment I could not do without is my portable PMR Radio and portable UHF. Trying to keep in radio contact is important both from a safety and operational perspective.

### Are you a Two Piece PPE or Overalls Firefighter?

I like my two piece PPE – it's so much easier and quicker to get on than overalls, which always seem to restrict my movements.

### Any final thoughts, comments or funny tales?

We are a lot better equipped than 20 years ago with vehicles and safety equipment and we've got an increased focus on training and preparedness but we need to try and encourage younger members to join the RFS and to do this we have to present ourselves as a very professional organisation.



**GROUP CAPTAIN  
DAVID LANG**

# MyRFS

## NEW TRAINING INFORMATION IN MYRFS

**M**yRFS has been working with Learning and Development (L&D) systems to provide access to course and assessment schedules across the state, through MyRFS.

### 'GIVING BRIGADES A WIDER RANGE OF COURSE OPTIONS'

Volunteers now have full access to Schedules both within and outside of their area, giving brigades a wider range of course options. This feature is available in the **Training** section.

Course Nominations can also be tracked through MyRFS, making the whole application for training increasingly transparent to participants. Look for **My Nominations** under My Profile.

Qualifications are now available under **My Profile** allowing registered MyRFS users to check that all qualifications are registered correctly. Where a qualification expires, this will also be listed.

Training and Assessment schedules are available in the **Training** section of MyRFS.

### New Fire Season Media information

During last year's fire season many MyRFS members told us that fire update information was slow getting to MyRFS. We are expecting this to change significantly this year with both the community and volunteers getting fire updates at the same time, from the RFS public website and MyRFS respectively.

This year – for the first time - fire updates will not be buried in the News section of MyRFS, but will have their own home.



For volunteers, these media updates will be linked with operational information to provide an operational view of fire activity across the state. For easy access, a new "Fire Updates" box will appear on the right-hand side and will display the latest ten fire updates in chronological order.

A full list of current fire media updates is always available under "Fire Updates" in the Reference section of the website.

### Coming soon to MyRFS

The application development team are currently working on two significant MyRFS functions which will improve news capabilities for all MyRFS users.

Late in 2007, we will provide the ability for all District, Team and Zone (DTZ) offices to communicate with their volunteer members directly through MyRFS.

The first stage of this project will be news functionality, followed by the ability to upload and update documents which flow down to all brigades in the DTZ.

This is expected to have a big impact on the amount of relevant information that DTZ offices can quickly and immediately flow-down to their members.



Once this stage is completed, MyRFS will be providing the ability for brigades to post news and documents for their members directly into MyRFS.

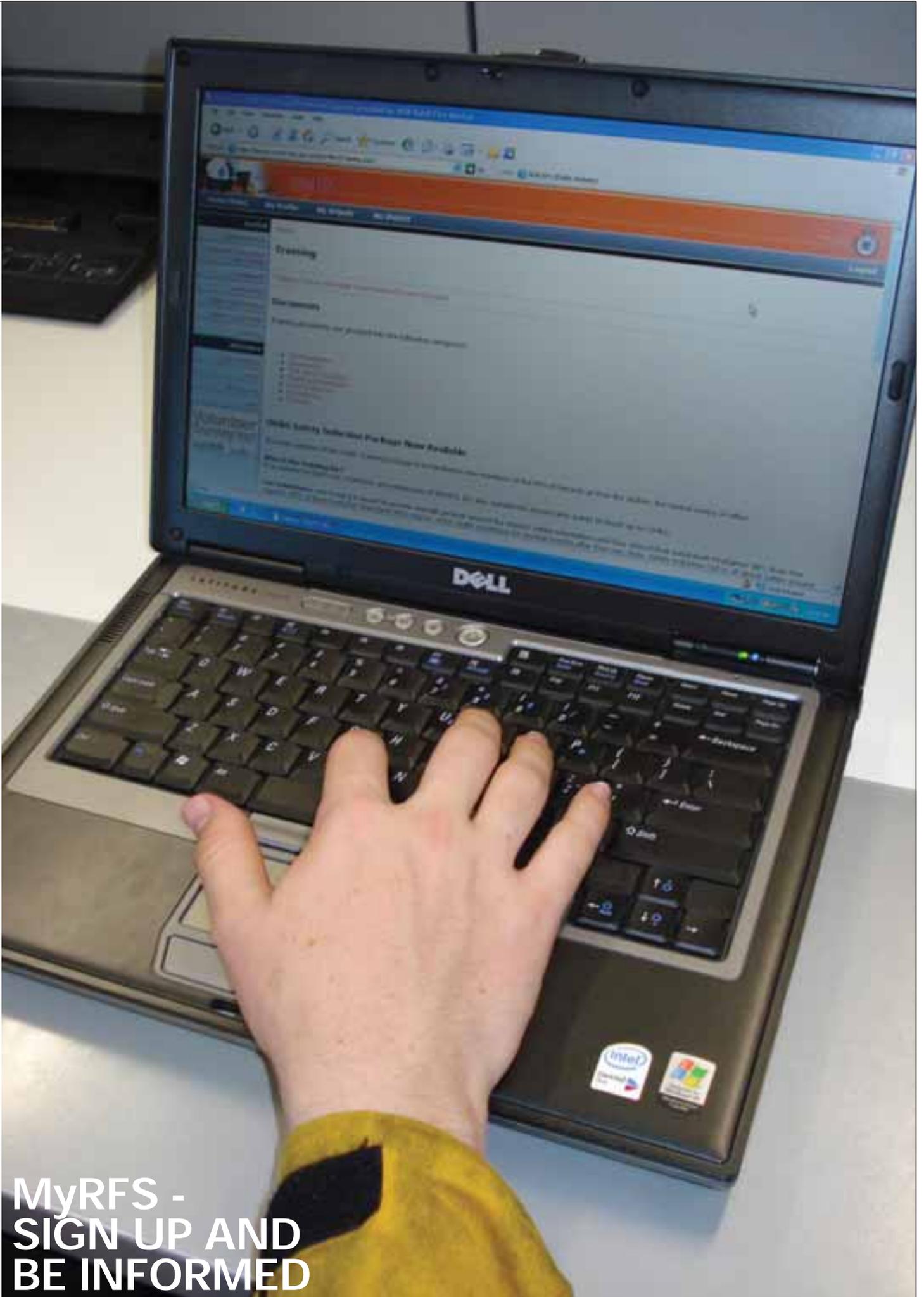
When this becomes available we will be notifying members through MyRFS and supplying training information to help brigades come up to speed with these new features.

### 'IT'S IMPORTANT FOR BRIGADES TO GET THEIR MEMBERS ONLINE'

So that users can be prepared, it's important for brigades to get their members online. To help you do this we've changed the Contact Book to indicate which of your brigade members are on MyRFS.

Users who don't have access to the internet should ask around to find out who in their brigade is registered to MyRFS, keeping linked in to the grapevine through them. The more people that register to MyRFS, the more helpful this new feature will be for users.

[www.myrfs.nsw.gov.au](http://www.myrfs.nsw.gov.au)



**MyRFS -  
SIGN UP AND  
BE INFORMED**



## HELP! MyRFS

**M**yRFS is becoming increasingly important to volunteers in all areas of the Service across the State. With new features such as training information, local news and more operational weather information coming online very soon MyRFS is becoming an essential source of information for brigades.

The MyRFS Helpline receives calls and emails from volunteers who have difficulties registering or logging in to MyRFS and we thought it was a good time to review how to get registered for MyRFS and the information you'll need to keep logging in.

The most important thing to remember when registering and using MyRFS is to read all the onscreen instructions... that way you can't go wrong.

See if one of the following issues applies to you then, follow the easy steps to fix the problem.

### My username and/or password is not recognised

The most common reasons for this is that the username or password has not been remembered or typed in correctly. You can solve this problem online for yourself: Your username is issued when you first register for MyRFS, it's important that you keep this information in a safe place so you can refer to it each time you login. Your username is a combination of three letters followed by three numbers.

Your password must be more than six characters long, and must contain at least one number.

Your username and password are case sensitive, which simply means that you must enter these details exactly as they appear in UPPERCASE and lowercase.

If you forget either your username or password, you can ask MyRFS to resend your username and issue a new password. Look for the link that says 'Forgotten your login details' and follow the instructions on the screen.

### I don't have my Firezone number

Each registered volunteer with the RFS has a Firezone number. This number is unique to each individual. Sometimes people get this confused with a brigade number or some other number.

Your Captain or Brigade Secretary may have your Firezone number on file, or else speak directly to the administrator in your District, Team or Zone office who can definitely help you.

### The system can not find any NSW RFS volunteer record with the details given... quote 'details check'

Sometimes your volunteer record may not be up-to-date and it requires a District Officer to take a look and make some changes before you can login. If this happens to you then call the MyRFS helpline for assistance on 1300 269737. You will need to provide your full name, a registered address and your brigade in order to be identified.

### When I try to register, MyRFS tells me I'm already registered

If you are registered with MyRFS already and you can't remember your username and password then follow the link for 'Forgotten your login details' and follow the onscreen instructions.

Once your username and password have been sent to you – login and visit the My Profile area. Once there, change your password to something you'll remember. Don't forget to write down your username as well.

### MyRFS keeps asking me to login...

MyRFS uses 'session cookies' to hold your username and password while you go from page to page. If your browser does not allow these session cookies, then you may get stuck at the login screen.

Follow these steps to resolve the problem in Internet Explorer:

1. Choose Tools, Internet Options
2. Click the Privacy tab
3. Press the Advanced button
4. Tick "Override Automatic Cookie Handling"
5. Tick "Always allow session cookies"
6. Click OK

We hope that this will help some of you having difficulties to get reacquainted with your MyRFS service. Don't forget that help is on hand with the MyRFS Helpline on 1300 269 737.

Stay tuned for more helpful hints in future editions of the Bushfire Bulletin.

# SPOTFIRE!



## CAR LOSES COOL... AND THEN ROOF!

Story by Stuart O'Keefe, The Lakes Team and RFS Learning and Development Systems  
Photos by Stuart O'Keefe

**A** routine call to a car fire at Tuggerah in July triggered some explosive events, providing a not so gentle reminder about the dangers of working around LPG.

At approximately 0730 hrs on 18 July 2007, two members from Chittaway Brigade responded to a car fire at Tuggerah Oval, South of Wyong.

On arrival the suspected stolen car was almost self extinguished, having been burning for some time.

Further inspection revealed the smouldering roof of the vehicle, some 30m down the road from the rest of the vehicle, along with an exploded LPG cylinder and one of its support straps.

## What happened to the car roof?

This incident is a reminder of the dangers that can be present at a routine call to a car

fire. The roof of the car was blown off by the violent rupturing of the car's LPG cylinder.

When fire impacts and heats up an LPG gas cylinder, the pressure builds up inside and the intense heat weakens the cylinder's metal. This can lead to the cylinder rupturing violently. The liquified gas in the cylinder then escapes suddenly and expands (about 250:1 for LPG) as it turns to vapour. This expanding gas cloud instantly ignites and explodes as it mixes with the surrounding air, while the ruptured cylinder may become a projectile hazard. This phenomenon is called a BLEVE, which stands for a Boiling Liquid Expanding Vapour Explosion.

BLEVEs are uncommon, but firefighters need to be aware of them, how to identify the potential for one, and how to prevent or avoid them. To prevent a BLEVE, gas cylinders must be cooled with lots of water from hose streams from a safe location to prevent dangerous heating of the cylinder. After fire extinguishment, cooling for a further 30 minutes is recommended until there is no residual heat in the metal.

There are a few ways to identify an LPG powered car. A red diamond is present on number plates, but these may have been

destroyed by fire, or removed. Some station wagons may have the spare wheel standing against a side window, as the cylinder is in the wheel well. With the prevalence of LPG-powered cars, caution should be taken at all car fires until the fuel source is confirmed. If an LPG cylinder is involved you may hear or see the cylinder relief valve operating as it allows the expanding gas to exit the cylinder. This gas jet may be alight, burn at very high temperatures, and suddenly project out several metres, usually from the sides of the vehicle, so care must be taken not to approach too closely until the cylinder has been cooled.

It is unclear whether the roof of this car was blown off by the physical rupturing of the gas cylinder, or whether the explosion of the escaping gas caused the main damage.

BLEVEs at car fires are not very common, and burning gas escaping from a pressure relief valve is often a more significant risk to firefighters. At many car fires in LPG powered cars, the flames do not impinge directly on the cylinder strongly enough or for long enough to produce the levels of sustained heating required for a BLEVE to occur. However it is not usually possible to tell when a BLEVE may occur, so firefighters must exercise active vigilance and act accordingly. Firefighters should also not be complacent about fires in petrol or diesel fuel vehicles as these also have the potential for explosion and a range of other hazards.

For more information see the section on vehicle fires in the RFS Village Firefighter (VF) and Crew Leader (CL) Manuals.

# CORPORATE NEWS



## WOMEN'S WORKSHOPS ANYTHING BUT BLAND

By Inspector Melissa Messenger,  
Bland Temora Zone

**T**he Bland Temora Zone recently ran a series of highly successful workshops on fire safety, specifically designed for women in rural areas and local villages.

### Why only women?

As I went around doing school and playgroup visits in the area, I felt that there was a lack of information given to women, and in particular mums, about fire safety and what to do in the event of an emergency.

With the ever increasing expectation of a big red truck at our doorstep, husbands away at work or on the farm, and women being left alone at home in a usually isolated situation, it was deemed time to go out and get women more informed and involved.

The program was quite ambitious, so it was advertised extensively using print media, local school newspapers, internet, flyers in shop windows and even over ABC local radio.

### Where did we go?

We went to six areas across the Bland Temora Zone - West Wyalong, Temora, Barmedman, Ungarie, Tallimba and Ariaiah Park, which covered most of our area in terms of population.

The sessions ran for a little over two hours and took in both theory and practical components. Attendees were also given RFS literature to take home and read to reinforce the information we were providing.

### What did we cover?

The key messages for the attendees were PREVENTION, PREPARTION, RESPONSE AND RECOVERY (PPRR), key elements in surviving any emergency. We looked at both bushfires and home fire safety as there are distinct methods of dealing with each.

The workshop began with a brief overview of the fire triangle and the behaviour of fire due to wind, topography, fuel loads. There was much discussion around the groups with plenty of stories of "well when we had this fire...".

We then discussed what you need to do to PPRR for a bushfire with an increased focus on the Bush FireWise Action Plan and whether to stay and defend or leave early. This information proved very useful to the ladies who attended.

When discussing home fire safety, we touched on safety issues around the house, the importance of smoke alarms and reinforced the message of relocation/escape plans.

At the end of the theory session, we went outdoors and gave the ladies the opportunity to practice using fire extinguishers at a hot

fire. They were then also taught how to use a portable pump and draft water from a dam. This proved to be very exciting for many women with most having a go.

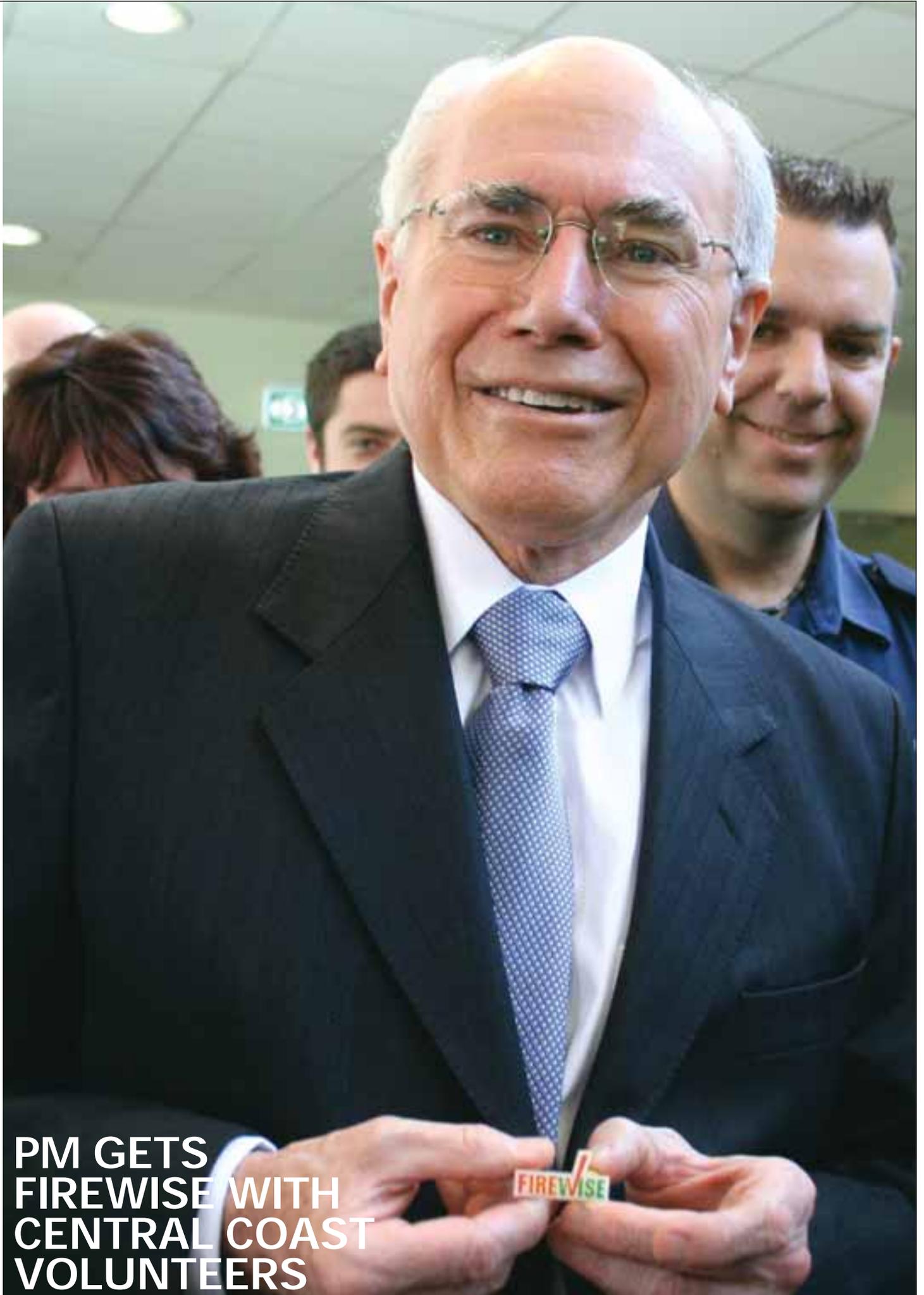
Overall, the sessions were very positive with all attendees stating they enjoyed the session and were glad they came. Almost all of the women said that they were now more informed about fire safety with several stating they were going home to clean the house or establish evacuation plans with their kids.

### What does the future hold for the workshops?

Everyone in attendance expressed interest in further workshops. Due to this interest, it is hoped that this will be an ongoing project to ensure that the skills we have passed on are not forgotten. Approximately 10 per cent of attendees also asked for a membership application to join their local brigade to get further hands-on firefighter training.

This project was very positive and worthwhile. I encourage any Zone, Team or District to get out there and establish dedicated training programs for those ladies who may not want to become members, but need the skills and knowledge to defend their families and homes in the likelihood of a fire or emergency.

A special thank you must go out to those volunteers who assisted with this project.



**PM GETS  
FIREWISE WITH  
CENTRAL COAST  
VOLUNTEERS**

## FIREWISE PROGRAM EVALUATED BY BUSHFIRE CRC

Story by Jen Dainer with assistance from Tony Jarrett, Eric Berry and the Blue Mountains Community Safety Group

**T**he Blue Mountains Community Safety group decided to let the Bushfire Cooperative Research Centre (CRC) evaluate their FireWise Program. So, how well are they doing at keeping their community safe? Jen Dainer interviewed Eric Berry of the Blue Mountains Community Group to find out.

**JD: Why did you decide to do the research?**

EB: We really wanted to make sure what we were doing was having the desired effect. We wanted to know if our program really worked, and if we could improve it. Particularly now that people have less time, and there are fewer funding opportunities, we wanted to show results for the time and money we were spending.

**JD: What were you hoping to achieve by doing the research?**

EB: We have known for some time that the "cookie cutter" one size fits all approach wasn't really achieving our goals. So, we asked some very tough questions across our communities, which really put our actions and strategies under the spotlight.

**JD: What kind of communities are you dealing with in the Blue Mountains?**

EB: There is just about every type of community in the Blue Mountains area.

We have areas of very young, urbanised people where the turnover of community members is around 30 per cent annually, affecting the amount of residual knowledge in those communities. On the other hand, there are pockets with very stable community profile, with a much higher average age, where there is a lot of residual knowledge. There is also everything between these two extremes.

The Blue Mountains also have areas and groups where conservation is highly valued, and pockets that directly contradict these values.

**JD: What was the aim of the research?**

EB: To have a look at what strategies we were using, whether they worked or not, and most importantly, why they did or didn't work.

Because some things work well in some areas, but are totally irrelevant in others. So we didn't want to throw the whole toolbox out, we just didn't want to use a hammer when we needed a screwdriver. We just wanted to get smarter at deploying our strategies.

**JD: How do you get "smart at deploying a strategy?"**



EB: You figure out what your community needs. That is, you have to go out and ask them, not assume that you know, or assume that what you've been doing for the past ten years is working.

**JD: How do you figure out what a community really needs?**

EB: You figure out what their values are. Ask them what the things are they value the most. Is it their family? Is it their house? Is it the environment? Is it a combination of all of those things? Which one is most important?

For some communities, their family is the most important thing. So, when we talk about home safety to the exclusion of all other messages, we were losing two thirds of our audience!

Some of the tools you can use are:

- Survey work – It can be labour intensive, but you only have to repeat it up to every five years, particularly in areas where there is low resident turnover. It can coincide with the census, as there are some strong links between demographics, opinions and values.
- Door-to-door can also be very labour intensive, but effective. Selecting a group of residents in an area to act as a barometer for your community can be enormously beneficial.
- Information displays in targeted areas can also be effective. This helps you

gauge what kind of questions people are asking and directly interact with them on how they'd like to find out information more regularly.

Once you've figured out what your community values, and how they want to receive the information, you can deploy many of the strategies you're already using.

**JD: What has the research uncovered?**

EB: It confirmed our suspicions that in the Blue Mountains, the cookie cutter approach is not effective. That is, you need to employ different strategies for different areas, and different communities.

In areas where there is low resident turnover, street meetings were not as effective. These types of communities valued community meetings more, particularly when the RFS tapped into already existing social networks (clubs, organisations, etc). However, in areas with higher resident turnover, street meetings were much more effective.

**JD: What is the difference between a Street Meeting and a Community Meeting?**

EB: The street meeting is quite relaxed, but it can be less interactive than a Community Meeting.

**JD: You've talked about the strategies you use that are successful, but what about the people? How much impact does the facilitator/presenter make?**

EB: The personal or "soft" skills that facilitators have can make an enormous difference to the outcomes achieved. Soft skills in this context can mean things like how the facilitator engages the audience, their presentation skills, their personal interaction skills, and so on. It doesn't mean how much subject matter knowledge they have, but how they deliver the message.

**JD: How do you use technology to supplement your strategies?**

EB: The Blue Mountains has a list of 1000 subscribers. Only 10 per cent of these have ever been to a Community or Street FireWise meeting. Therefore, it's a totally different audience we're targeting. This is very effective at delivering messages, and seeding ideas for people to seek out more information. It only works if people sign up to it though, but can be phenomenally successful during operational periods.

Don't underestimate the success of applying community education strategies in summer that you would normally only engage in during winter.

**JD: What are the key points to come out of this research?**

EB: One: Find out what your community values (so you can pick the right message!)

If people in the community don't highly value home safety, then delivering a home safety message to the exclusion of all others won't result in behavioural change, as you may lose a large chunk of your audience.

Don't underestimate how important the environmental message is to people, particularly when climate change is firmly on the agenda. When you're using environmentally sustainable practices use this message as well.

Two: Pick the right method of delivery for your message.

We haven't been doing everything wrong all along; we could just deliver it with better results. You can't deliver a message from a script anymore as it doesn't result in behavioural change. You have to be adaptive and really find out how the community responds to your messages.

**JD: Has this research fundamentally changed the way Community Safety is approached and conducted in the Blue Mountains?**

EB: Absolutely! We're always looking at how we can do things better and how we can understand them better. That's always our end goal.

Now we have:

- A toolkit of approaches and knowledge of where they work best
- A framework for helping brigades decide which strategies they should use
- Sessions that develop soft skills among our community educators
- A group of very experienced facilitators who can help any brigade across the state build the most appropriate strategy.

All you need to do is find out what the community wants to know, and how they want it delivered.

For more information about the Bushfire CRC, please contact Eric Berry (eric.berry@rfs.nsw.gov.au) or Tony Jarrett from the Blue Mountains or Jen Dainer at RFS HQ (jen.dainer@rfs.nsw.gov.au). Plenty of useful content can also be found at [www.bushfirecrc.com](http://www.bushfirecrc.com)

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Sean gets a briefing on a recent fire



## RFS A FAMILY MATTER

Story by Dr Jim McLennan, Bushfire CRC  
Photo by Glenn Elliott, Bushfire CRC

**V**olunteering with the RFS is said to be a family matter for many volunteers. Sean Cowlshaw wants to find out what kind of a family matter it is. Sean is a Bushfire Cooperative Research Centre (CRC) PhD student at La Trobe University in Melbourne.

"We know that RFS volunteering puts a unique blend of pressures on volunteers and their families," Cowlshaw says. "But fire agencies need to know more about these pressures so they can make sure that families of volunteers get the support they need. Some of the things we know

about include partners worrying when the volunteer is away for long periods on campaign fires. It also seems that some volunteers put the brigade ahead of the family on occasions, which probably doesn't go down too well if it happens a lot."

Sean began the project by interviewing managers of CFA volunteers, but soon realised he really needed to hear it from the volunteers, and most of all from their spouses and partners. Sean plans to seek input from volunteers and their partners in all states and the ACT. He also wants to find out about the impacts on families of other emergency services volunteering, like SES and volunteer rescue.

"Not all impacts need be negative. Volunteering can lead to more social contacts in the local community, especially if you are new to the area."

The research is being supervised by Dr Jim McLennan, manager of the Bushfire Cooperative Research Centre Volunteerism Project (phone 03 9479 2420), who is very enthusiastic about Sean's work. "This is ground breaking stuff! Nothing like Sean's study has been done anywhere else in the world," McLennan says.

Great care is being taken to ensure that information provided is anonymous and confidential. To find out more or to obtain the forms electronically, go to [www.latrobe.edu.au/bushfirecrc](http://www.latrobe.edu.au/bushfirecrc).

Alternatively, interested people can phone 1300 850 199 (free call) and leave a message with your address, if you want to have the material, including a reply paid envelope mailed to you, or, if you would like the material sent to you in an electronic form, leave an email address. No records will be kept of any contacts. Returns go to La Trobe University by Reply Paid mail.

Sean is aiming to give agencies a report with recommendations on family support needs around July next year. If you would like more information, or want to obtain a summary of findings, you can contact Sean on [s.cowlshaw@latrobe.edu.au](mailto:s.cowlshaw@latrobe.edu.au).

## Families of Emergency Service Volunteers

**Participants wanted:** emergency service volunteers and their families.

**What's involved?** Only that *you and your partner* complete questionnaires about your well-being, family health, and impacts of emergency services volunteering on your **family**.

**Who will benefit?** Taking part will provide information so agencies can better support their volunteers' families. We are also offering couples the chance to **win** one of **5x \$50** gift-vouchers to compensate for your time.

**Who can take part?** Couples where one (or both) partners are emergency service volunteers. Including firefighters, SES, and other emergency services volunteers.

**How can you find out more?** (a) call our toll-free voicemail service (ph. 1300 85 01 99) and leave your name and contact details (we will post a package to you); or (b) visit our web-site ([www.latrobe.edu.au/bushfirecrc](http://www.latrobe.edu.au/bushfirecrc)) to download the information package.

**Your participation is voluntary and you will be under no pressure to take part if you inquire!**



[www.latrobe.edu.au/bushfirecrc](http://www.latrobe.edu.au/bushfirecrc)

Ph. 1300 85 01 99

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# SPOTFIRE!

## NORTH WEST TEAM KEPT BUSY WITH THREE HOUSE FIRES IN FIVE DAYS

Story and photos by Superintendent Mark Ryan, North West Team

Over five days in early July this year the North West Team (Coonamble, Walgett, Warren and Bogan) were responded to three house fires.

The first call, to a house 60km east of Coonamble, came in at approximately 2100 hrs on Friday 6 July. Gummin 1 and Coonamble HQ 1A, along with the on call officer FCO 1 were responded, however on arrival it was found the house was fully alight and there was very little crews could do. There was no one in the house at the time.

### 'THERE WERE FIVE OCCUPANTS IN THE HOUSE INCLUDING THREE CHILDREN ASLEEP'

The second call was received at 0315 hrs on Sunday 8 July to a house alight on Quambone Road, 21km west of Gulargambone. There were five occupants in the house including three children asleep. Bourbah Brigade along with Gulargambone 1 and 7, and the on call officer FCO 1 were responded to again find the house fully alight. Thankfully, all occupants got out of the house safely.

### 'ONE OF THE CHILDREN WOKE THEIR MOTHER TO ALERT HER OF THE FIRE'

The third call in less than a week was received at 0715 hrs on Wednesday 11 July to a house alight in the village of Collarenebri. Again there were five occupants in the house, four of which were children. One of the children woke their mother to alert her of the fire, and they all escaped without harm.

Collarenebri 1 and 2, backed up by NSWFB Walgett, and the on call officer FCO 1 were responded. Upon arrival, crews found the building fully alight and quick thinking by crews allowed them to force access to the back of the property and protect another home on an adjoining property. Unfortunately the house where the fire started was completely destroyed.

RFS and the NSW Police Forensic Services Group are investigating all these fires and will target specific community education programs on the causes of the fires in excess of the winter program where appropriate.

#### From top:

House fire at Collarenebri

Investigators at the site at Gulargambone

House Fire 60km east of Coonamble





## MANAGEMENT CONFERENCE A SUCCESS

**A**fter a gap of four years the Service's Management Conference is once again on the corporate events calendar.

The 2007 conference was held in Coffs Harbour from 6-10 August and attended by more than 100 RFS personnel.

### People are our Business

The conference theme of 'People are our Business' was supported through a range of renowned speakers from within the Service, the private sector and another fire agency, each of whom brought different and challenging perspectives to this topic.

### The guest speakers

The keynote speaker was Naomi Brown, Chief Executive Officer of the Australasian Fire Authorities Council and a former head of the SES in Western Australia and Director of Community Safety for the CFA in Victoria. Naomi has worked extensively

with all Australian fire services, the Bushfire Cooperative Research Centre and Emergency Management Australia. Her paper 'The Lone Ranger vs The Sydney Swans' examined the value of agencies working together rather than working independently of each other.

Naomi was followed by Tom Rogers, currently Australian Electoral Officer for NSW, who was also formerly Director of Programs at the Australian Institute of Police Management. In a previous life Tom was also a graduate of the Royal Military College, Duntroon and the Royal Australian Air Force Staff College and participated in the United States Federal Bureau of Investigation's National Executive Institute and Leadership in Counter-Terrorism programs. Tom also commanded a United Nations peacekeeping unit on the Golan Heights in the Middle East.

A different and informative view of fire service structure and operations was delivered by Superintendent Graham Swift of the Fire and Emergency Services Authority of WA, and an excellent presentation outlining how FESA was formed and how it works generated a significant level of interest.

Robyn Moore, who was a huge success at the Region East Conference earlier this year, repeated her presentation on 'The Power of the Word'. The female voice of the political satire radio program 'How Green Was My Cactus', enthralled delegates for an hour with humour, drama, comedy, pathos and a gamut of other emotions as she showed how the use of words and positive thoughts can generate the basis for effective communication between people.

A day-long workshop, 'The Power of Engagement', previously run at the Region West Conference, was presented by David Hanlon and Jill Rigney and although very labour intensive was unanimously welcomed by delegates as being a highlight of the Conference.

A series of in-Service presentations and workshops rounded off a very demanding and successful conference which was supported by a 28-stand trade fair.



## CONFERENCE AUCTION RAISES \$17,500 FOR CHARITY

A charity auction at the official dinner for the 2007 Management Conference raised \$17,500 - to be shared between the Salvation Army and the Coffee4Kids Foundation.



### 150 in attendance

The dinner, attended by 150 delegates, suppliers and guests was held at the Bonville International Golf Club and fully sponsored by Isuzu and Gilbert & Roach.

### 'A HIGHLY RECEPTIVE AND GENEROUS AUDIENCE'

Through the generosity of many of the Service's sponsors, suppliers and supporters a wide range of goods was donated and auctioned to a highly receptive and generous audience by those well known auctioneers Paul Springett (HQ) and Paul Smith (Region West).

The most popular item for the night proved to be a signed Wallaby Rugby jumper, which was snatched up by Quick Corp for a cool \$3,000.

The Coffee4Kids Foundation and Salvation Army were thrilled by the money raised from the auction.

### Donated items, and their auction prices, included:

Signed Wallaby Rugby Jumper (ARU)	\$3,000
Cricket Bat signed by Brett Lee (Uvex)	\$1,200
Engel fridge (Isuzu/Gilbert & Roach)	\$1,450
Engel fridge (Isuzu/Gilbert & Roach)	\$1,900
Engel fridge (Isuzu/Gilbert & Roach)	\$1,500
New York Fire Department special edition fire helmet (Pacific Helmets)	\$850
Five laps of Eastern Creek raceway	\$800 x 2
Cricket ball and miniature cricket bat signed by Glenn McGrath (Uvex)	\$800

Our thanks go to all our friends at Uvex, Pacific Helmets, Gilbert & Roach, Pacific Helmets, Motorola, Nokia, Britax, Lander Toyota, Canon, Ford, Taipan Boots, Opal Cove Resort, Husqvarna, Sutttons Motors Holden and the Australian Rugby Union for their ongoing support of the Service and the charity dinner.



## RFS ESTABLISHES A NEW LOOK AUDIT UNIT

### What is the Audit Unit?

The Audit Unit was established in late 2004 under the direction of the Corporate Planning and Performance Manager. Kerri Grott, the initial Audit Systems Officer, created the Service Audit Framework in consultation with many stakeholders.

The framework provides a coordinated and systematic approach to the management and conduct of internal systems audit functions within the RFS.

The Service has recently appointed a Systems Audit Supervisor, Carolyn Cuello, and an Audit Systems Officer, Amanda Carroll, to expand on this approach.

### Why did we establish this framework?

NSW Government policy requires that we have an audit system in place.

Management believes that the established framework will also enable us to identify business risks while providing a total quality

management system that will ensure we remain a worldwide centre of excellence among the firefighting fraternity.

The Service's Audit Coordination Group oversees the Systems Audit process and acts as a conduit to the Corporate Executive Group. The Audit Unit also consults extensively with head office and regional managers so that these managers are aware of how their commitment benefits all of us.

### What does this mean to me?

The Systems Audit is a process that asks the following questions: What is the Policy, Service Standard or SOP asking me to do? Is the process working? Do the people working with the process understand it? If not, why not? What suggestions can I make to improve the Policy, Service Standard or SOP?

To do this, the Service has committed to training staff members to undertake audits in four key areas:

### Management; Learning and Development; Community Safety; and Operations

The Audit Unit will then prepare an audit schedule which addresses the needs according to risk within the RFS. The trained auditors then arrange a suitable time to meet with the managers of the various units to follow a 'checklist' of questions to see where there may be gaps in the systems.

Once these gaps are identified, there are a few things that can be done to address these issues. One way is to issue what is known as a CAR (Corrective Action Request), an agreement made between the auditee and the auditor to address the issue in a certain timeframe.

### 'THE AUDIT UNIT TAKES THE INFORMATION BACK TO THE DOCUMENT OWNER ADVISING THEM WHERE THERE IS A PERCEIVED CONCERN WITH THE SYSTEM'

Another method of improvement is to create a BIR (Business Improvement Request), which means that the Audit Unit takes the information back to the document owner advising them where there is a perceived concern with the system, and to make improvements where necessary.

Most importantly, these auditing processes have been put in place not to make life difficult, but instead to identify risks and areas in which we can improve upon, making life easier!

If you would like to discuss the audit process, or have any questions you would like answered please contact Carolyn (02 8741 5220) or Amanda (02 8741 5182) in the Audit Unit.



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## Well, it has finally happened!

Due to an increase in our item range we can no longer fit everything onto our 'usual' Order Form style advertisement, but we want to assure you that we are still in business, selling reasonably priced RFS Approved quality goods and giving the same first class service and prompt delivery as we have been doing since we first became an approved supplier way back in 1994.

We can send you an order form via fax or post if you do not have access to the internet... please phone us

The accompanying pictures show the current new RFS Approved Items, which we are now permitted to add to our range and due to Customer demand, we hope to further expand the range in the near future. The new silk-screened T Shirt and Polo Shirt (both 100% Cotton) are AUSTRALIAN MADE as are our Embroidered T's and Polo Shirts, Sloppy Joes and Dress Jumpers.

We know there are cheaper imports but we choose to stay with the same suppliers we have had since commencing our business, as we can be assured of continuing supply and quality.

Our Company is also the official supplier of the 'new' RFS Logo Cap shown on the left.

OUR CURRENT RANGE OF GOODS INCLUDING THE NEW ITEMS View our Website for Pictures and Information on the various Items

Caps - new RFS logo style and our original  
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Cricket Hats **\$15.00**

Polar Fleecy Beanies **\$12.50**

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Screen Printed Polo Shirt with Pocket (100% Cotton)  
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Embroidered T Shirts  
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## FIXED WING REMOTE SENSING AIRCRAFT



# LINESCANNING OPERATIONS

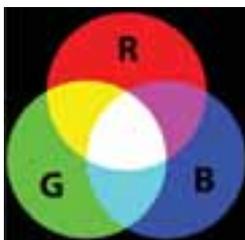
The Beechcraft twin engine Super KingAir, callsign "Firescan 255", uses on average 380 litres/hr and has a cruising speed of 515km/hr.

The RFS is committed to providing its incident management teams and firefighters in the field with accurate and useful spatial information to assist with fire fighting operations. One of the most significant technologies being employed is a multispectral linescanner, which is a sophisticated imaging device that can track fire spread.

Historically, this type of imaging has been around since the early 1980s and since 1994 it has been used to scan fires within NSW. Initially it was only used to identify and locate fires in remote areas because the technology was somewhat crude by comparison with today's. Once the data was collected, it would often take 24 to 48 hours to process and map the information and deliver it to the relevant incident management team.

In 2003 the RFS entered into an exclusive contractual arrangement to lease a twin-engine KingAir aircraft, specifically equipped for strategic fire reconnaissance using linescanner technology. The information gathered allows firefighters to pinpoint the location of active fire fronts, spot fires and burnt areas as well as providing an indication of the fire intensity, direction and points of origin. Incredibly this is achieved even in the presence of smoke which is often the main hindrance to monitoring and fighting a bushfire. In turn this helps the RFS plan appropriate tactics, establish containment lines, and place personnel, tankers, aircraft and heavy machinery during a fire emergency.

### How the Linescanner Works



Most digital cameras can be thought of as multispectral since they collect three bands (red, green and blue) of visible data. In the same manner as projectors or

television screens, the combination of these three bands produce colour images that closely resemble what is seen by the human eye. For example, something that appears yellow will have roughly equal red and green reflectance with very little or no blue.

The linescanner used for RFS operations is the Daedalus 1268 ATM (Airborne Thematic Mapper). This collects data in 12 discrete regions (or bands) of the electromagnetic spectrum, so in addition to visible wavelengths it also collects infra-red (IR) data that cannot be seen with the naked eye. The data from three of these non-visible IR bands are displayed as red, green, and blue values in what is subsequently known as a "false colour" image. The particular combination used by the RFS projects the longwave IR band as red, the shortwave IR band as green, and the near IR band as blue – this produces what is known as a "fire enhanced" image. The reason behind these choices lies in the characteristics of these regions of the spectrum, most noticeably the ability to penetrate smoke. The longwave IR (false red) has high values for hot sources as does the shortwave IR (false green) once temperatures reach excessive values associated with fire. In a fire enhanced image, an active fire front will therefore

appear as a yellow/orange colour. Similar analysis means that during a daytime flight, burnt areas will appear brown/red and background vegetative or urban areas appear green. Even heavy smoke from a fire will only slightly darken the colours in a fire enhanced image, however clouds will appear light blue/turquoise due to water content which absorbs the thermal radiation.

### Operational Procedures

A request for a linescan may emanate from the Incident Controller, the Major Incident Coordinator or the State Operations Coordinator. In consultation with the State Air Desk and GIS Coordinator, the need and priorities are established. If the aircraft is not on "standby", there may be a 2 – 3 hour lead time prior to departure.

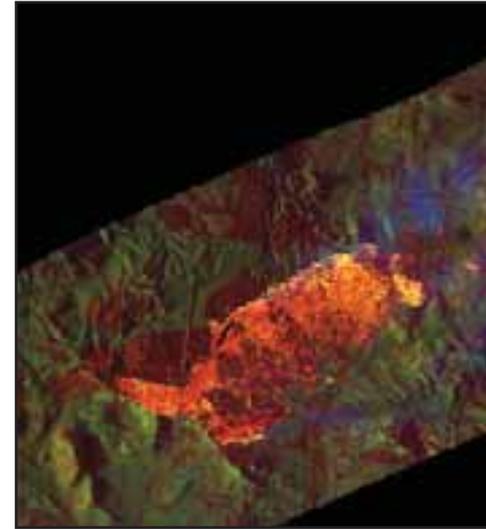
Once the imagery is collected, it is quickly corrected in flight to remove any warping effects due to the motion of the aircraft. As part of this process it is also geo-referenced so that it can be overlaid onto a map. Since 2004 the images have been downloaded in-flight directly to the RFS Head Office using Telstra's CDMA network. The 2006-2007 fire season was fairly busy in terms of linescan operations – 457 images were collected on 63 flights over numerous fire areas. This is a significant amount of data to transfer over a mobile network not designed for airborne use, so other alternative downlinking systems are currently being explored. The RFS GIS unit are assisting this process as part of a project that they recently commenced. The project aims to further enhance the efficiency and quality of the linescan data collection processes such that the information is available to decision makers in as timely a manner as possible.



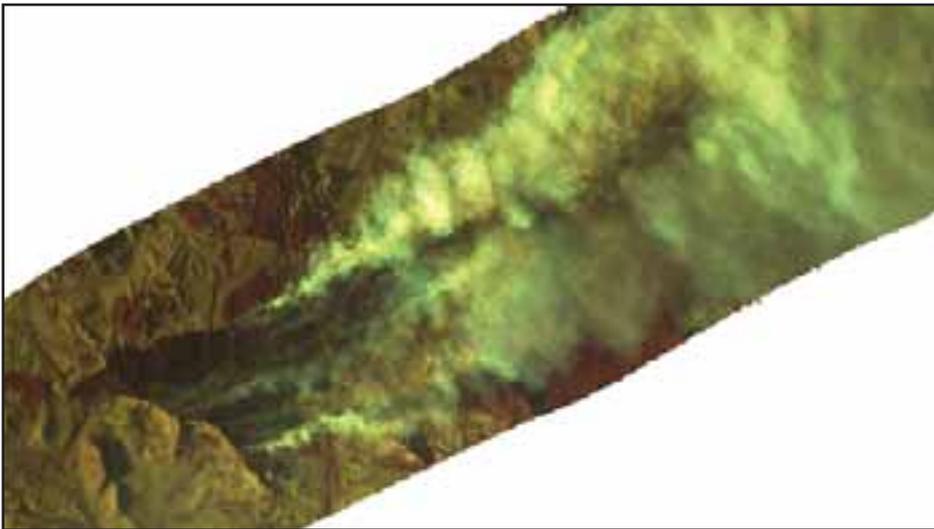
# LINESCANNING



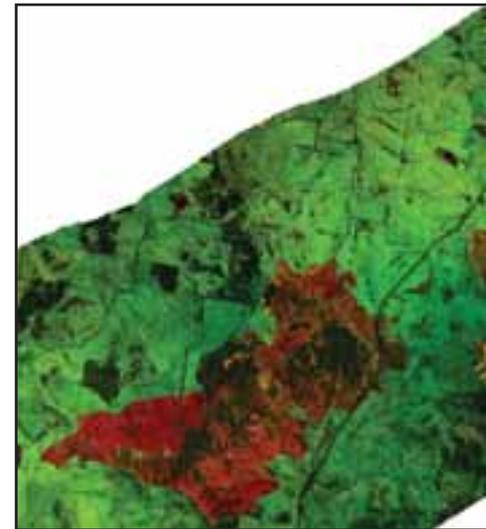
Wandoo s44 fire near Wagga Wagga. Digital photograph taken from the aircraft shortly before 1925 hours on 6 February 2006.



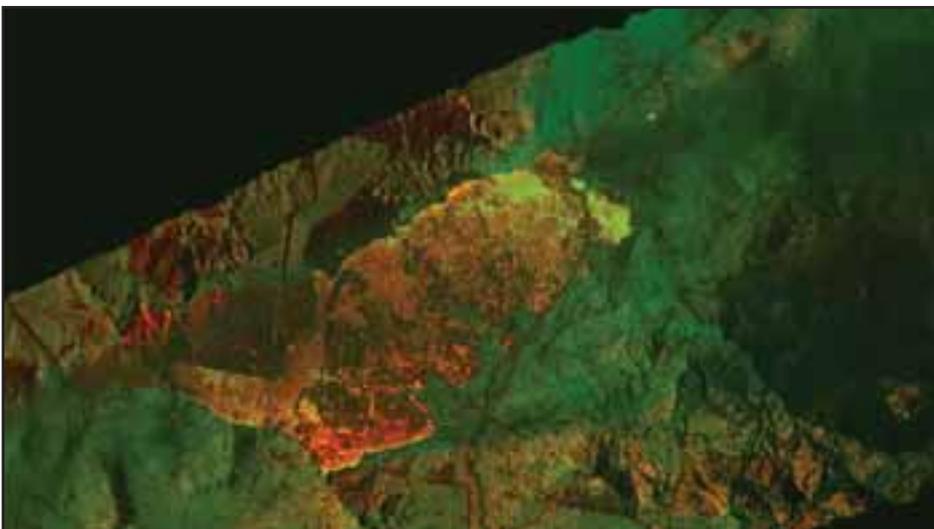
Wandoo fire. Again this shows a "false colour" (fire-enhanced) linescan image (fire-enhanced) at 1925 hours on 6 February 2006. In less than an hour, these two spotfires have grown.



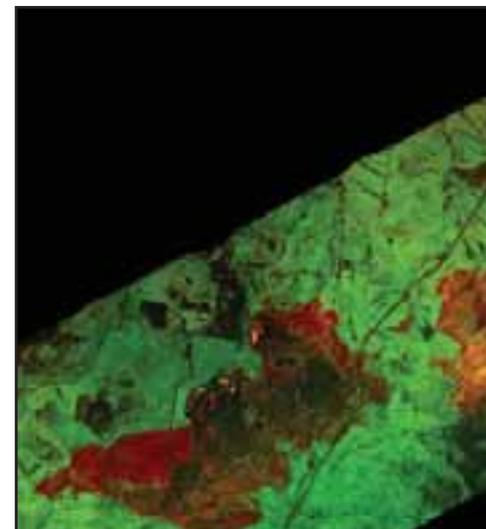
Wandoo fire. This shows a "true colour" linescan image at 1925 hours on 6 February 2006. By true-colour it is meant that the data collected at red, green and blue (visible) wavelengths is displayed as these colours so that the image resembles what would be seen by the human eye. **Note that it is extremely hard to glean any information from this image about the location of active fire-fronts, spot fires or burnt area.**



Wandoo fire. This shows a linescan acquisition at 1150 hours on 6 February 2006. The fire has burnt overnight. Also notice the backburning operation area.

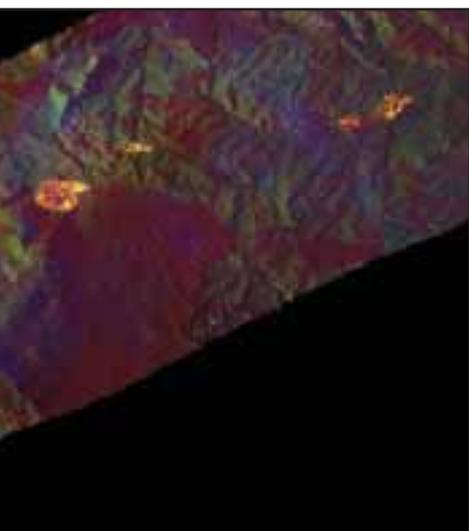


Wandoo fire. This shows a "false colour" (fire-enhanced) linescan acquisition at 1829 hours on 6 February 2006. The image highlights two spotfires (yellow) to the northeast of the fire which are visible even through the smoke which can be seen as a darkening effect.

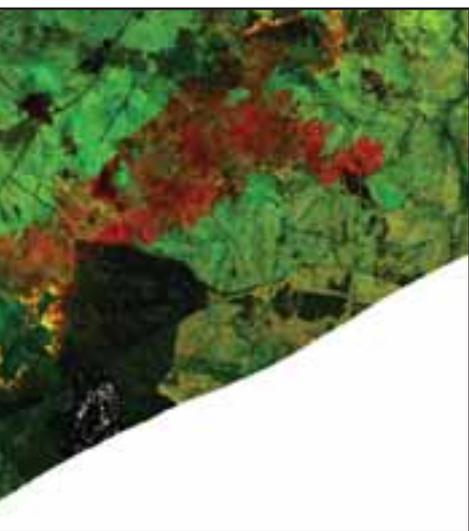


Wandoo fire. Linescan acquisition at 1529 hours on 7 February 2006. The fire (south) has nearly burnt itself out by the afternoon.

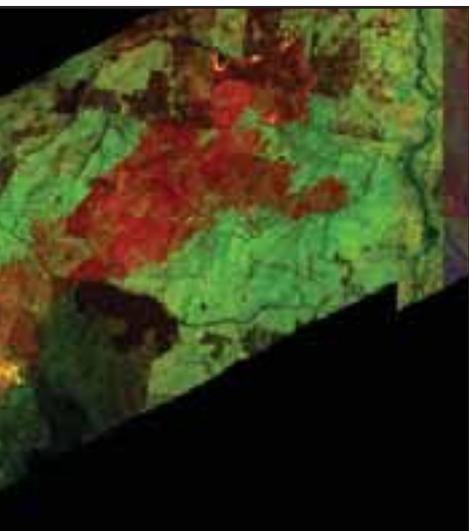
# LINESCANNING OPERATIONS



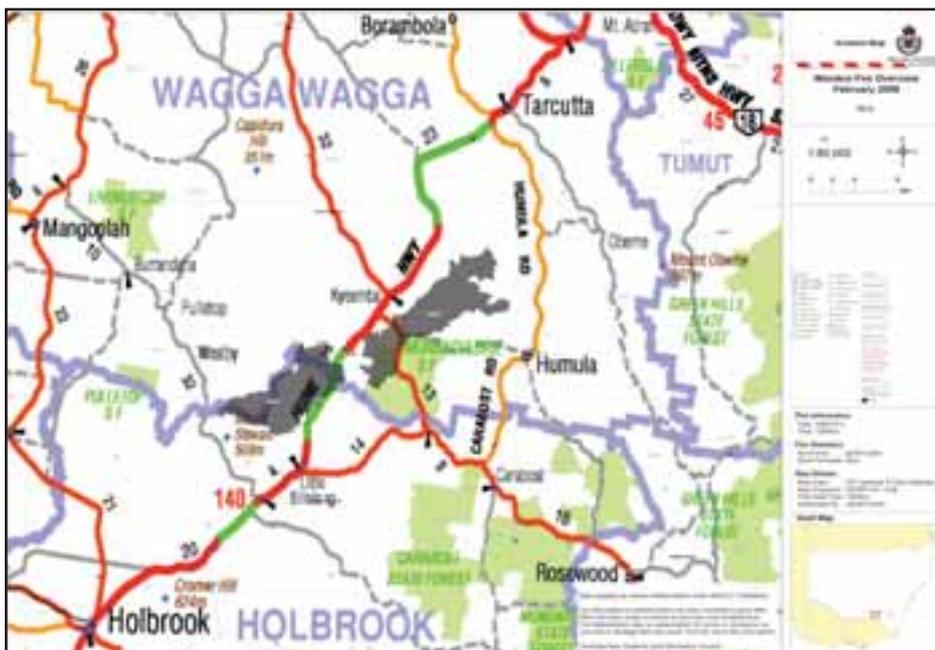
(anced) linescan acquisition at 1925 hours on 6 February 2006. The fire activity is broken up into much larger fires in their own right.



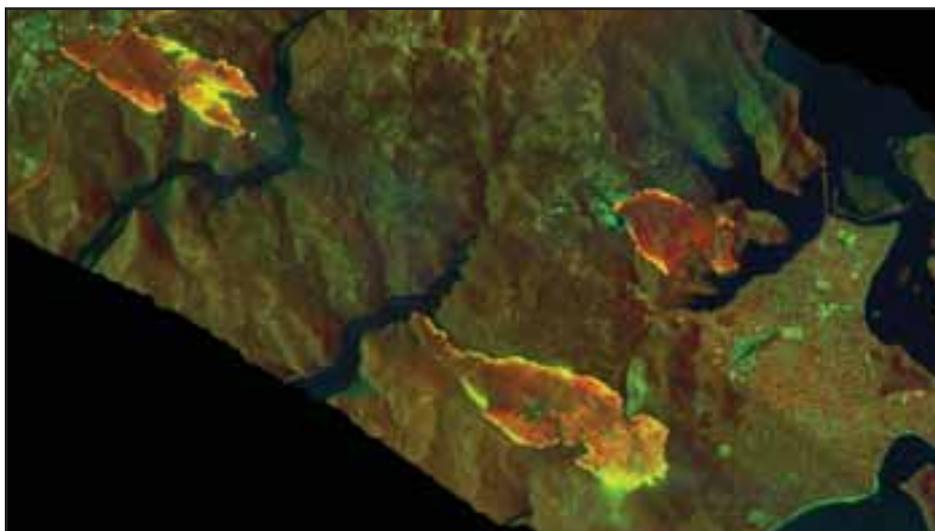
0600 hours on 7 February 2006. This highlights how much the fire activity (centre-south) that was started prior to the morning.



0600 hours on 7 February 2006. Notice the backburning operation (centre-

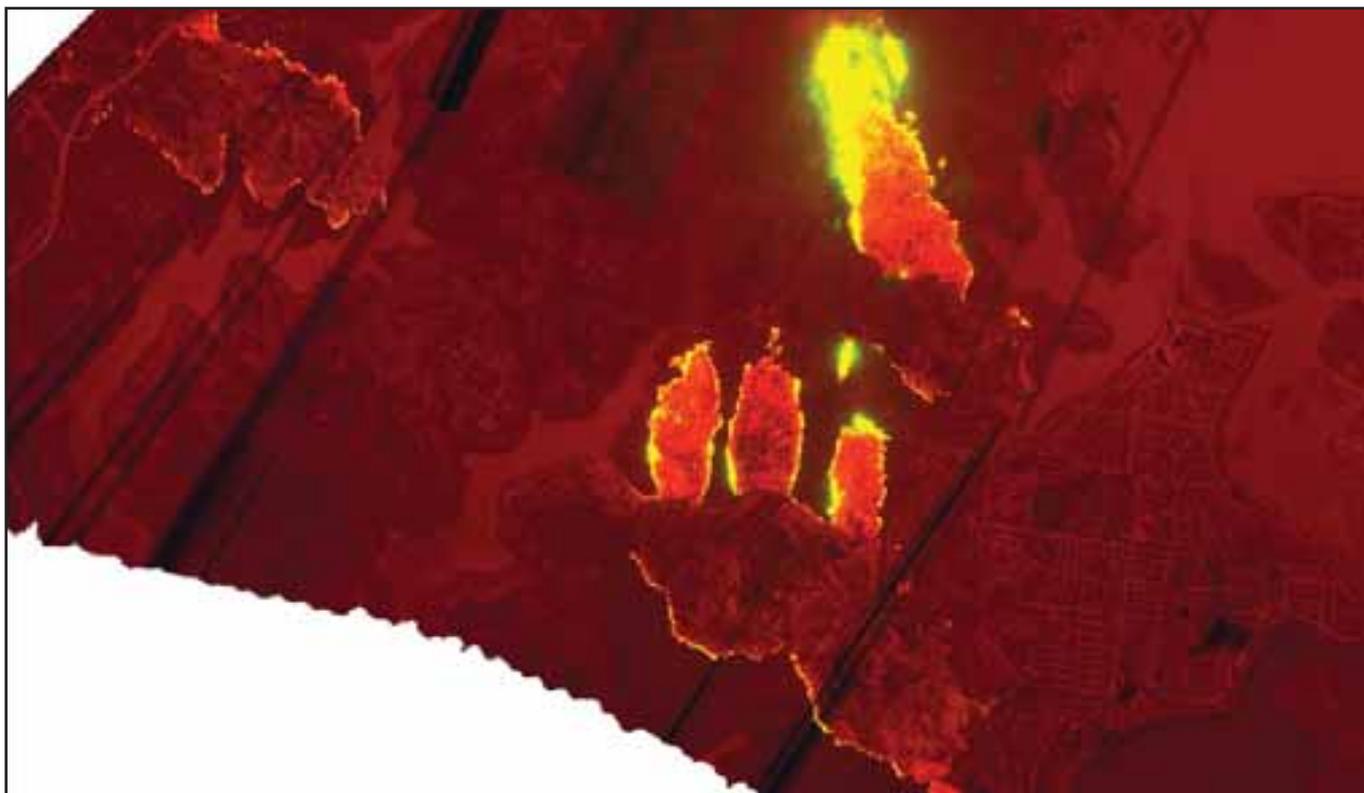


Wandoo fire. Spatial information from the linescan images transposed onto a map. The total burnt area is highlighted in grey.

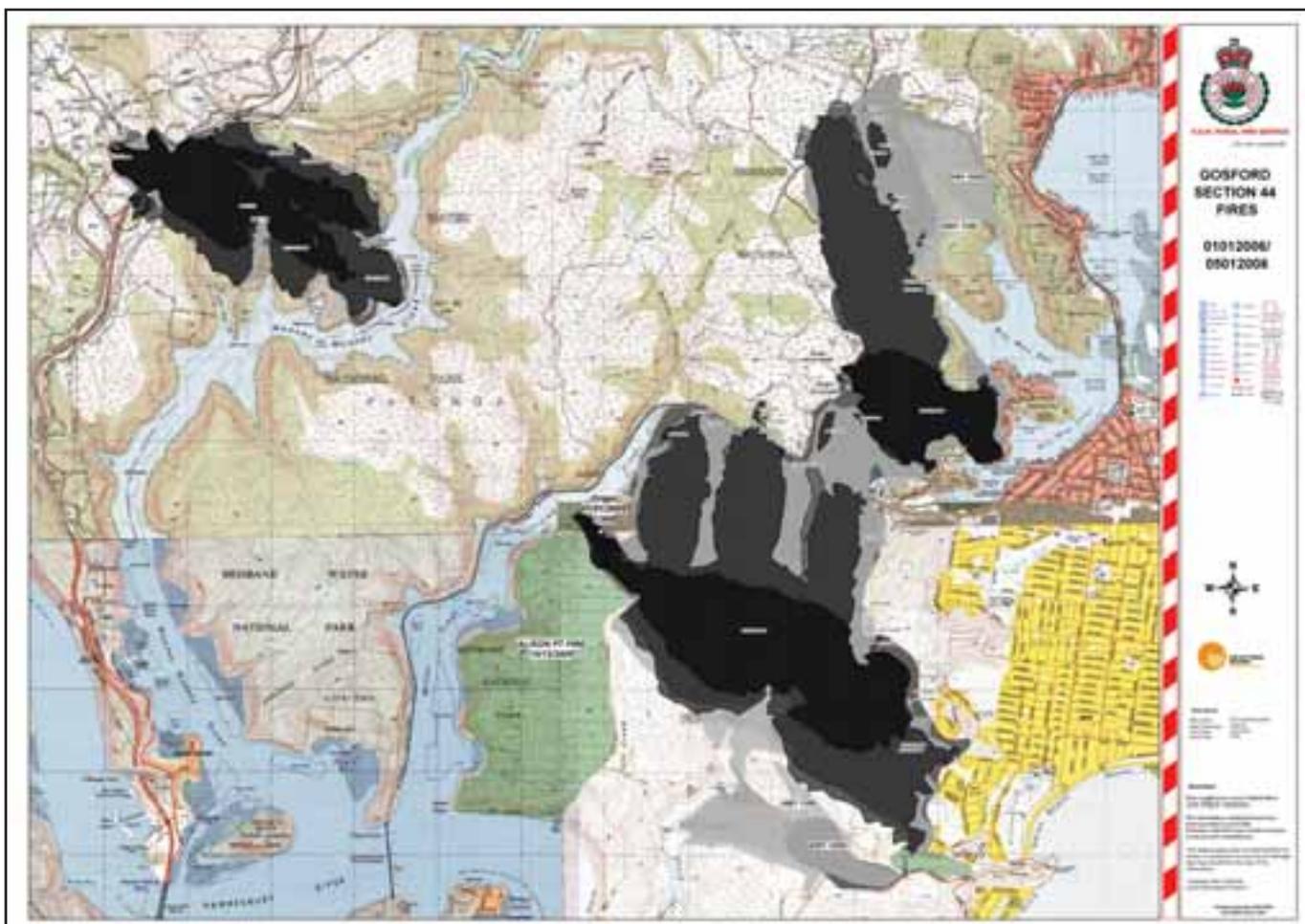


Gosford S44 linescan acquisition at 1730 hours on 1 January 2006. This shows the Mt White fire, the Alison Point 2 fire and the Quarry fire under the influence of the north westerly. The temperature was 43 degrees, relative humidity down to 17% and the wind gusting to 41km/hr. The urban areas of Phegans Bay, Horsefield Bay, Woy Woy, Umina Beach and Pearl Beach, which are clearly seen to the east of the fire, were potentially under direct threat prior to the change in wind direction.

Pull out this section to display in your station or Fire Control Centre



Gosford S44 night-time linescan acquisition at 2341 hours on 1 January 2006. This shows the effects of the southerly change and in particular highlights the spot fire that is clearly visible just north of the eastern finger. A total of 652 homes were threatened by the fire and three homes, one outbuilding and nine vehicles were destroyed, with damage sustained to a further 18 homes. Who knows what these totals may have reached without the fireground intelligence provided by the linescan imagery.



Spatial information from the Gosford S44 linescan images transposed onto a map. The initial burnt area is black and the total burnt ground after the southerly change is grey. This was readily available to both the District and State Operations. All three fires were declared out on 18 January 2006.

**Chief Superintendent Alan Brinkworth AFSM, Manager Operations, Policy and Standards  
and Daniel Howes, GIS Officer (Spatial Research)**

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# GENERAL NEWS

## 'FIREFIGHTERS HELPING KIDS' - 2007 VARIETY BASH BASE

Story by Paul McGrath, OV 12 NSW RFS Support Vehicle

**O**n Sunday 5 August 2007 Team Excalibur, consisting of 15 firefighters from the RFS and NSW Fire Brigades, set off on the 5,151km drive to Darwin as part of the annual NSW Variety Bash.

### A fun fundraiser

Beginning from Garden Island on the edge of Sydney Harbour, Team Excalibur, which consisted of a F100 ute and a Dodge fire truck, began a journey which would eventually raise over \$40,000 for the kids of Variety and spread the fire safety message across the eastern seaboard under the motto 'Firefighters helping kids'.

### 'ALL 128 CARS PARTICIPATING HAVE AN ENJOYABLE TIME TRAVELLING TO PARTS OF AUSTRALIA THEY WOULD NOT OTHERWISE SEE'

The Bash is not a race, nor is it a rally, which means that speed is not a factor. Rather, it is a drive in the outback with other fundraisers who share a common aim. What really matters is that all 128 cars participating have an enjoyable time travelling to parts of Australia they would not otherwise see, while at the same time raising vital funds to support children in need.

### Community safety initiatives

The RFS/NSWFB team used the unique opportunity to promote community safety initiatives in remote and isolated communities throughout the journey. Both services presented community safety initiatives and education sessions along the Bash route in towns such as Dubbo, Warren and Brewarrina.



Paul McGrath and Mick Middleton OV12



In conjunction with the Queensland and Northern Territory Fire and Rescue Services,

Team Excalibur also conducted fire safety demonstrations in such towns as Longreach, Burketown, Borroloola and Katherine.

### 'EVERY DOLLAR TREVOR AND KEITH RAISE GOES STRAIGHT TO VARIETY'

Excalibur team leader and retained NSWFB firefighter Trevor Lang worked tirelessly along with his son, Blue Mountains RFS Deputy Captain Keith Lang, to raise funds for the event and most importantly the kids in the lead up to the Bash.

Trevor and Keith's passion for this event is second to none and every dollar they raise goes straight to Variety. In addition, all team members pay for their own meals and expenses during the Bash to maximise the contributions participants make.

The raising of sponsorship monies is a year-long process, and as one Bash finishes the process starts all over again. Each year the team has gone from strength to strength, with 2007 being no exception.



**TEAM  
EXCALIBUR  
WITH THEIR  
DODGE  
FIRETRUCK**

From Left to Right  
Keith Lang, Guy Ellis, Kel O'Shea,  
Gary Lang and George Irwin

**Below left:** George Irwin conducting fire safety presentation with Keith Lang

**Below right:** Matt Peace going for the ride of his life



Trevor Lang the morning after the head shave fundraiser



This year the team visited around 14 primary schools, four hospitals and in true firefighter spirit, presented each school with smoke alarms, fire safety information, printers and scanners from Canon and sporting equipment sponsored by St Mary's Leagues Club - but it didn't stop there.

Trevor and Keith wanted to do more for each of the schools they visited so prior to the Bash, arrangements were made for students from each school to take part in a writing competition. Winners of the competition were presented with a selection of books thanks to Doubleday to go with a selection of art supplies from Matisse Derivan.

### A little off the top and sides

Trevor's commitment to kids with special needs was demonstrated unselfishly in the township of Thargomindah (QLD) where he volunteered to have his head shaved. Participants from the Bash, local community members and officials made cash donations in excess of \$6,500 to support Trevor's new look.

Dave Nelson, better known as 'Mr Fix It' is just one of the many team members that deserves a gold medal. Dave's skill, knowledge and support was forever assisting Team Excalibur and its support crews to ensure the vehicles, and personnel made it to Darwin on time.

Team members Gary Lang, Guy Ellis, Kel O'Shea and George Irwin assisted on a



daily basis, from helping service the team vehicles to conducting demonstrations for students. As the raffle winner of a seat in the Dodge, Kel also played an active role in the presentations by donning the Bernie Cinders suit (NSWFB) at a number of the presentations. George's presentations to the students will be remembered for a long time to come. Not to be left out of the excitement, Gary and Guy took the opportunity to hand out RFS and NSWFB giveaways, fire safety information and provide good moral support for the presenters.

RFS Variety Bash Co-ordinator, Brian Graham said the joint fire services commitment to the event wouldn't be possible without the support of many people.

"The work carried out by personnel from both the RFS and NSW Fire Brigades was paramount in Team Excalibur being able to make the trip," Brian said.

"The likes of Karl Duesing and Cath Dorahy in official vehicle (OV) 11 NSWFB and Paul McGrath and volunteer Mick Middleton in OV12 NSWRFBS was immeasurable. I must also thank both Mark Fullagar and Ed Gaunt who assisted in providing a stage at the start of the Bash at Garden Island with 'Big Ed', and then assisted the Bash organisers and our team in presenting ComEd presentations during the NSW leg of the Bash.

"These guys not only assisted Team Excalibur in presentations to schools and

assisted in handing out material to kids, but also fulfilled a vital support role as officials for the Bash. This consisted of manning check-points, assisting the organisers in all aspects of the running and organising of the Bash proper, which did entail at times spending long periods of time in remote locations having to entertain themselves, and I'll just leave it at that!

"I would like to personally acknowledge their work and dedication to the Bash and Variety. Working as volunteers during the entire Bash, sometimes for periods in excess of 12 hours a day, and all in the name of support for the kids and Team Excalibur."

At one point one of the Nissan Patrol support vehicles broke down for two days in a remote part of the Northern Territory with a major electrical fault. Undeterred, the guys managed to occupy themselves during this time and arrange to get the vehicle repaired and back into the Bash.

From Base to Dubbo the team was provided with additional support from the Blue Mountains Rural Fire District. Volunteers from the Woodford Brigade joined the team for the drive to Dubbo and assisted with presentations and moral support. The team also brought along an extra passenger for the trip to Dubbo, Hawkesbury Rural Fire District volunteer Matt Peace, who was born with Cerebral Palsy. The Excalibur Team brought him along for the ride of his life, with Matt experiencing a trip in the Bash helicopter where he was given a bird's eye view of Dubbo and surrounding areas.

Variety is dedicated to improving the quality of life of special needs children. Variety started in Australia in 1975 and now has separate representation in each state. In the year to December 2006, Variety NSW made over 350 grants totalling \$3.5 million to individual children, hospitals, schools and community groups. Throughout Australia over \$13 million was given to help children and organisations in need.

For further information about the Bash or if you are interesting in sponsoring the event, please contact Trevor Lang on 0407 285 612.

The team would also like to take this opportunity to thank our team sponsors:

#### Team Excalibur Sponsors

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GAAM  
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Flashpoint Fire Services  
RFS  
Buzz Aviation  
Skyfuel  
Kuipers Engineering (incl. Technology Plus Signs)  
Phillips Fabrication

Terry Jackson, Keith Harrop and Mal Cronstedt with the Community First Responder graduates

## MT WILSON/MT IRVINE RFB COMMUNITY FIRST RESPONDER IN MEDICAL EMERGENCY

Story by Kathleen Oakes

To offset the medical pitfalls of living in a remote location in the upper reaches of the Blue Mountains where tourists flock during the warmer months, members from the Mt Wilson/Mt Irvine Rural Fire Brigade (RFB) have become the first in the State to graduate in the Community First Responder program.

The program is a joint initiative between the RFS and the NSW Ambulance Service and aims to impart expertise and equipment to selected RFS volunteers that will enable them to respond to medical emergencies in areas a fair distance from the nearest ambulance service.

### 'MEDICAL EMERGENCIES IN AREAS A FAIR DISTANCE FROM THE NEAREST AMBULANCE SERVICE'

In the case of Mt Wilson/Mt Irvine RFB, selected and trained volunteer firefighters will be supported by both services to provide an immediate local medical emergency response pending the arrival of Ambulance Officers.

### Seven members complete the program

In the first intake for the RFS, seven members of the Brigade completed the program, led by Barry Freeman (West 3), Peter Raines (Captain), Beth Raines (Deputy Captain), Kathleen Oakes (Secretary), Diana Landsberg, Libby Raines and Suzzane Daly.

Almost 70 residents (only 12 of whom are under the age of 50) call the two villages home, however, an additional 200-plus residents, including a large number of retirees and part-time workers, are weekend residents of the picturesque area.

### 'THE NEAREST AMBULANCE STATION IS MORE THAN 30 MINUTES AWAY'

Added to this list are the many bushwalkers, canyoners and campers who come to visit the World Heritage-listed area via the busy Bells Line of Road from Sydney to Lithgow. This road has been declared by the NRMA as one of the most dangerous roads in Australia and the need for community members with emergency medical knowledge is obvious. Especially since the nearest ambulance station is at Lithgow, more than 30 minutes away.

### Seven reasons to be trained

All seven participants came together with their own personal reasons for wanting to be trained as a Community First Responder,



but all share the same community focus. "I undertook the First Responder training because, with a history of emergency care, I felt it was something I could contribute to our community. The course has given me both new skills that I can use as a First Responder and the confidence to use them," said Diana Landsberg.

Fellow attendee, Beth Raines, said the course has given her more confidence to assist people in need.

"I did it because I was concerned about the time it took for help to arrive from Lithgow, especially when it came to locating people and houses, because we still predominately use property names and not street numbers," she said.

"There have also been occasions where we were asked to assist the Ambulance Officers at motor vehicle accidents and we probably felt a little out of depth on these occasions. All this new training has been

really good – it has given us all a lot of confidence to help people when they need help the most."

### 'THERE WILL BE FURTHER COMMUNITY FIRST RESPONDER GROUPS DEVELOPED AROUND THE STATE'

Mt Wilson/Mt Irvine Rural Fire Brigade was the 'pilot' site for the RFS and now that the unit is fully established, there will be further Community First Responder groups developed around the State. Any Brigade in an isolated area that is interested and committed to providing such a service to the community should, in the first instance, discuss their proposal with their District Manager. The location of any new units will be by agreement with and prioritised by the Ambulance Service and State Operations.

## AMY FIRES UP FOR A CAUSE

Story and photos by Robert Findlay,  
Erowal Bay RFB

**W**hen Erowal Bay firefighter Amy Findlay saw that the Central American firefighters virtually had no equipment, she decided something had to be done.

Amy has returned to Australia following a trip to Central America and wants to raise money to assist the struggling firefighters. She has taken a gap year after completing her HSC at Vincentia High School in 2006 and hopes to commence a double degree in graphic design and photography next year at Charles Sturt University.

During her four month trip, Amy stayed in Guatemala, but also travelled to Honduras and Mexico.

### The Bomberos Volunterios

Before leaving, Amy wrote to the Jervis Bay Lions Club and asked them for funding so that she could make a contribution on their behalf to a Central American organisation that was in need of assistance. The Lions Club donated \$200 towards Amy's cause. In Guatemala, Amy observed many worthy recipients for this funding, but as an RFS volunteer firefighter in the Erowal Bay Brigade she was drawn to the Bomberos Volunterios (volunteer firefighters) in the town of Puerto Barrios on the Atlantic coast of Guatemala.

**'24 MEMBERS, FOUR OF WHOM ARE FEMALE, PROVIDE FIREFIGHTING AND AMBULANCE SERVICES TO A TOWN OF 80,000 PEOPLE'**

### Second-hand equipment

The volunteer brigade of Puerto Barrios has 24 members, four of whom are female, and provide firefighting and ambulance services to a town of 80,000 people. They have a crew manning the station 24 hours a day. The Brigade receives virtually no government funding and relies on outdated, second-hand, and mostly non-functioning equipment from the United States, which the volunteers then have to restore and repair themselves.

Much of this equipment is just sitting idle while funding is sought to buy spare parts such as starter motors and other basic parts.

**'NO EQUIPMENT TO ENTER BUILDINGS TO REMOVE INJURED AND TRAPPED OCCUPANTS'**

The firefighters of Puerto Barrios have to contend with more than one structural fire each week and due to lack of equipment are only able to protect the surrounding properties. They have no equipment to enter buildings to remove injured and



Captain Federico Pined and Amy Findlay in a Voluntario Bombero uniform donated by American firefighters

trapped occupants, but often risk their lives trying to do so.

To make any sort of comparison you would have to imagine the whole of the Shoalhaven Fire District with just one functioning late 1960's or early 70's fire truck with inadequate and leaking hoses, one 12,000 gallon backup water truck with no available hydrants or water mains to refill from.

### Water access a stretch

The nearest accessible water is located approximately 12 kilometres away. To make matters worse, the town is a major shipping port and is where fuel for the country is offloaded and stored for distribution throughout Guatemala. No extra firefighting equipment is located in or around this port infrastructure.

### Firefighter/Ambulance Officer

Amy said that as well as facing immense firefighting challenges, these same 24 volunteers would be the Shoalhaven's only ambulance service.

Due to the help of the local Puerto Barrios Rotary club they now have two old vans with basic equipment to provide the best ambulance service they can with the limited resources available.

Amy was moved by the hardship that these hardworking and totally ill-equipped volunteers faced and the trying conditions in which they worked.

### Amy donates her own money

She presented the Puerto Barrios Bomberos Volunterios with the \$200 from the Jervis Bay Lions Club and donated a further \$300 of her own money.

Captain Federico Humberto Pined of the Puerto Barrios Bomberos Volunterios specifically asked Amy if she would seek any help that people could give his firefighters.

### Captain's plea for help

"We are in desperate need of any help that we can get," he said.

From top: Captain Fedreico Pined, Amy Findlay and four Voluntario Bomberos from Puerto Barrios in front of the brigade's only working fire truck



"So much of the well being of this large community is dependent on us volunteers."

"Sometimes we feel so useless with what we have to use. Please people of Australia could you help us."

### Any donations appreciated

Amy would appreciate any donation to help keep her promise to assist this deprived, yet dedicated group of volunteers.

If you feel you could offer help in anyway, please send a donation to:

The Secretary,  
Erowal Bay Rural Fire Brigade.  
PO Box 2, Erowal Bay  
NSW 2540.

Please write your cheque to Erowal Bay RFB with an attached note that it is for the: Amy Findlay Puerto Barrios Bomberos Volunterios Fundraising Appeal.



Donated vehicles from the USA waiting for funding to buy spare parts, so the volunteers can repair them

## WOLLONDILLY EXTENDS FIREWISE PROGRAM DEEP INTO THE COMMUNITY

Story and photos by Helen Fenning and Superintendent Ted Williams

**T**he FireWise community education program is still relatively young in the Wollondilly District. However, a small and enthusiastic band of volunteers is beginning to make significant inroads in engaging the local community on the important aspects of bushfire awareness.

The establishment of a Community Education Team in 2003, under the coordination of Helen Fenning and Cheryl Ashton, has proven a big success among all levels of the community. Local brigades in the Wollondilly district have been educating their community on bushfire safety for many years.

Fetes, fairs and community events are just a few of the high profile events held in the area which have been targeted by the group in an effort to explain how to be FireWise to large cross sections of residents. At a younger level, the Kids FireWise program, incorporating home fire and bushfire safety, is currently being delivered throughout local pre schools and primary schools to kids aged from as young as three, up to the age of 12.

### FireWise facilitators growing

Wollondilly's keen group of FireWise facilitators is steadily growing in number in line with demand for assistance in the delivery of the important concept among not only local brigades, but the community as well.

In the village of Buxton, a number of community meetings were held where facilitators gained further interest from residents who wanted to know more about how they could protect themselves in the event of a bushfire threat.

Following careful planning and consultation by FireWise facilitators and Buxton Brigade with local Captain Graham Whitely and the District Superintendent, a small community in the high bushfire risk area of Arden Road was identified and set-up as the District's first Community FireWise Group. In total, seven landholders attended the inaugural 'gathering' in an effort to enhance their knowledge of the program.

### Pile burn demonstration

Attendees received an information pack with a range of information to reinforce the bushfire awareness message along with a Bush Firewise Action Plan. As part of the presentation a pile burn was conducted with careful instruction on content, size, weather and local government requirements. This practical component of the day proved to be a worthy and fun exercise for the entire group.



Cheryl Ashton conducting the presentation



Buxton Deputy Captain Peter Fenning explaining the finer points of pile burning

### 'ABLE TO MAKE INFORMED DECISIONS ON WHETHER TO 'STAY AND DEFEND' OR 'LEAVE EARLY' '

A second 'gathering' was soon organised along with draft timelines for action plans to be completed. With the assistance of two highly recommended educational DVDs and plenty of discussion on the need for preparedness, residents felt they were now able to make informed decisions on whether to 'Stay and Defend' or 'Leave Early'.

The next 'gathering' was held at Buxton Fire Station and the invitation was eagerly accepted. Residents crossed the threshold! With the aid of a whiteboard, participants

brainstormed the Bush FireWise Action Plan as a group, although each attendee had their individual plan to suit their own needs and circumstances. The group also chose a group coordinator who will continue to develop links between the community and Buxton Brigade.

The Arden Road group is now planning their own pile burns and are navigating the RFS website to gain more information. They generally feel pleased that they have taken steps for their protection in the event of a bushfire threat, and a social gathering for an extension of this community has been arranged. It is hoped another community FireWise group in the District will develop very soon.



The volunteers that attend Comex are put into teams that are made up of five communication operators from the various brigades. By creating teams of people who do not normally work together, a team building exercise is formulated which encourages cohesion within the newly formed teams. The learning experience that the operators get is invaluable not only to themselves but to the RFS as well.

The exercises included navigation, air radio, operational command vehicle (OCV) operation and setup, flight following/search and rescue (SAR) and ICON Situation Report entry/overview.

On Sunday, teams participated in team building exercises at the excellent YMCA venue.

The State OCV from Region North was also used as the control centre for the weekend.



The Saturday night dinner included guest speaker Chief Superintendent Bruce McDonald from Operational Communications at RFS Headquarters.

Bruce spoke on the future of communications in the RFS, which was supplemented by a question and answer session that was very informative and well received by the members.

The entertainment for the evening was an enlightening recital by the Hawkesbury District Concert Band - Stage Band, which included three Hawkesbury Communications and one brigade member. They were followed by Cumberland Communications Captain Ron Freeman's Band 'Generation Gap', who along with others entertained the throng till late.



The exercise gave not only the Communications members training, but also provided some local Group Officer candidates from both Cumberland and Hawkesbury with exposure to Incident Control System (ICS) roles as part of the Incident Management Team (IMT).

The organising Committee would like to thank both the RFS and the RFSA for their sponsorship and commitment to Comex 2007 which provided everyone with valuable training and fellowship in Communications within the RFS.

## COMEX 2007 DRAWS PERSONNEL FROM ACROSS THE REGION

Story and photos by Inspector Tony Gray, Cumberland Zone

The YMCA camp at Yarramundi, northwest of Sydney, was the site for the 8th NSW RFS Region East Communication Exercise (COMEX) held on 3-5 August, 2007, involving 15 teams from across the region and one from Region West.

The Cumberland and Hawkesbury Communications teams played host to the exercise with assistance from the Blue Mountains and Baulkham Hills

Communications teams.

Brigade stations at Berkshire Park, Llandilo, Grose Wold, Grose Vale and St Paul's Grammar School Cadet Brigade also hosted exercises on the Saturday.

Comex is the only communications exercise run specifically for volunteer communication operators, by volunteers. The aim of Comex is to increase and enhance the skill level of communications operators. It is a way of testing their current skills and stretching them to learn new methods in a practical way. It is also a great way for communication operators to interact with operators from other brigades.

### Communications personnel from the following brigades attended the exercise:

- |                       |                |
|-----------------------|----------------|
| Baulkham Hills        | Blue Mountains |
| Cudgegong             | Cumberland     |
| Hawkesbury            | Hastings       |
| Hornsby               | Hunter         |
| Illawarra             | Lithgow        |
| Lower Hunter          | Macarthur      |
| Warringah - Pittwater | Wollondilly    |
| Wyong                 |                |



## SOUTH KOREAN DELEGATES VISIT RFS HQ

By Matthew Schroder and Superintendent Brian Graham

**F**or a number of years, the Business Development section of the RFS has hosted delegates from the forestry department of South Korea, training them in the principles of the RFS Incident Control System (ICS).

### 'THE DELEGATES HAD DEVELOPED A STRONG UNDERSTANDING OF HOW ICS WORKS'

The most recent group of delegates travelled out to Australia during May to undertake a week-long course to certify them in the processes of ICS. By the end of their visit, the delegates had developed a strong understanding of how ICS works and the major roles of the system in relation to their individual fields of work back in South Korea in such fields as operations, logistics and planning.

Delegates also attended Gosford Fire Control Centre (FCC) and were provided with invaluable information on how the district dealt with a recent section 44 utilising ICS. The delegates were very impressed with the professionalism of the staff and volunteers at Gosford. This ICS course was conducted by two



volunteer instructors, Nick Helyer from Hornsby and Warwick Teasdale from Gosford.

Delegates from the forestry department have visited Australia for the past three years and another trip is planned for next year.

### First visit from South Korea

The May delegation also saw the RFS receive its first visitors from South Korea's Gyeonggi Fire Services. This was a forward party travelling to Australia to conduct fact

finding into ICS. The delegates were given a tour of the building, and factors that went into its design, structure and purpose.

The delegates were given a two-hour briefing on ICS and were very interested in the role of ICS as an operations management tool.

The fire services representatives have now returned to South Korea to report back and discuss whether they would like to continue further with ICS.

## EVER WONDERED HOW GOOD YOUR HELMET IS?

Story by RFS Engineering Department

**H**ow good is your helmet and will it actually protect your brain? The RFS Engineering Department provides a little insight into what to expect should the unexpected occur.

These may seem like easy questions, ones you probably think you can answer. But the real answers, as you are about to see, are anything but easy.

There's a fundamental debate in the helmet industry. Is a fibreglass-reinforced shell better than a Polycarbonate/ABS type or the other way round? It's a debate about how strong and how stiff a helmet should be to provide the best possible protection.

Why the debate? Because if a helmet is too stiff it can be less able to prevent brain injury, and if it's too soft, it might not protect you at all.

So what is just right? Well, that's why it's called a debate. If you knew what was going to hit your head and how hard, you could choose the perfect helmet for that. But incidents are accidents and as a result, you have to guess.

### 'THE CONSISTENCY OF THE HUMAN BRAIN IS LIKE WARM JELLY'

To understand how a helmet protects, or doesn't protect, your brain, it helps to appreciate just how fragile that organ actually is. The consistency of the human brain is like warm jelly. A warning, the next bit adapted from articles by Dr Harry Hurt and the Snell Foundation (2001) is a bit gruesome...

Your brain is gooey and basically floats inside your skull, within a bath of cervical-spinal fluid and a protective cocoon called the dura. But when your skull stops suddenly - as it does when it hits something hard - the brain keeps going, as Sir Isaac Newton predicted. Then it has its own collision with the inside of the skull. If that collision is too severe, the brain can sustain any number of injuries... Once your brain is injured, even more damage can occur, as when the brain is bashed or injured internally, bleeding and inflammation make it swell. When your brain swells inside the skull, there's no place for that extra volume to go. So it presses harder against the inside of the skull and as it squeezes, more damage is done to some very vital regions.

### This is not good for you!

To try and prevent the above we wear our helmets - we use our brains to protect us.

Our helmets have three main parts: the outer shell, the inner harness and chin strap and then the ear/neck flap. The chin and flap are not covered in this article.



RFS bushfire helmet





The outer shells come in two basic streams: composite and moulded thermo plastic (the current RFS helmet).

The shell is there for a number of reasons; to protect against pointy things trying to penetrate, to protect against impact, and to shield us against heat.

### 'THE PART OF THE HELMET THAT ABSORBS MOST OF THE ENERGY IN AN ACCIDENT IS THE INNER HARNESS'

Helmet manufacturers pay a lot of attention to the outer shell and its inner harness. Surprisingly, the part of the helmet that absorbs most of the energy in an accident is actually the inner harness.

When an object hits the helmet, the outer shell stops it instantly. Inside, your head keeps going until the harness starts performing its function. When this happens, the harness' job is to bring the head to a gentle stop - if you want your brain to keep working like it does now, that is.

The best thing about the inner liner harness is that it absorbs a lot of the force (energy) at a manageable rate. It does not hold the force and spring it back like a spring - this would not be good as it would shake the brain again.

The helmet's shell also absorbs energy as it flexes in the case of a polycarbonate helmet, or flexes, crushes and delaminates in the case of a fibreglass composite helmet.

To reduce the forces on your soft, squishy jelly as it stops, you want to slow your head down over as great a distance as possible. So the perfect helmet would be huge, with six inches or more of soft, foam covered harness holding your carefully prized head like a diamond on a pillow.

This presents a major problem as nobody wants a metre-wide helmet, although it could come in handy for a sun shade.

So helmet manufacturers have optimised the designs over many, many years. The Australian Standard calls for a minimum spacing between harness and shell so that the impact is not directly on our skull and leaves room for the harness to do its work and does not increase the G-loading on your brain in an accident. How many Gs a helmet transmits to the head, for how long, and in what kind of accident, make the variables that create the helmet to meet the Standard.

### Australian Standards

Because there are few human volunteers for high-impact helmet testing (but we all know a few who think they could try it) and because they would be a little confused after a hard day of impacts - it's done on a test rig.

The helmets are set on a special head form and a weight or conical spike are used to impact the helmet. The impact energy level of the test can be easily monitored and precisely repeated. As the test weight falls, it is guided by a pair of steel cables. That guiding system adds friction to slow the fall minutely, so the test technician corrects for this by raising the initial drop height accordingly.

The head form has an accelerometer inside that precisely records the impact the head

form receives, showing how many Gs (in metres per second) the head form took as it stopped and for how long.

If you test a bunch of helmets under the same conditions you can get a good idea of how well each one absorbs a particular hit. And it's important to understand that a lower number is always better.

"What should the [G] limit on helmets be? Under the Australian Standard the limit is 980 m/s<sup>2</sup> for the impact test, with gravity being 9.8 m/s<sup>2</sup> which equates to 100Gs.



### How Hurt is Hurt?

Doctors and head-injury researchers use a rating of injuries, called AIS (Abbreviated Injury Scale) to describe how severely you are injured when you come into a medical facility. AIS 1 means you've been barely injured. AIS 6 means you're dead or soon to be.

#### The AIS scale:

**AIS 1 = Minor**

**AIS 2 = Moderate**

**AIS 3 = Serious**

**AIS 4 = Severe**

**AIS 5 = Critical**

**AIS 6 = Non survivable (Dead)**

Approximately 200 to 250 Gs generally corresponds to a head injury of AIS 4, or severe; a 250 G to 300 G impact corresponds to AIS 5, or critical; and anything over 300 Gs corresponds to AIS 6 i.e. non survivable.

Who thinks getting hit with much more than 200 Gs is a bad idea? In fact, researchers have pretty much agreed on that for 50 years.

### 'TRAUMATIC BRAIN INJURY MEANS GETTING HIT TOO HARD ON THE HEAD'

Is an impact over the theoretical 200 G/2 millisecond threshold going to kill you? Probably not. Is it going to hurt you like hell? Depends on you, and how much over that threshold your particular impact happens to be. But head injuries short of death are no joke. Traumatic Brain Injury means getting hit too hard on the head. That's debilitating, meaning victims aren't the same as they used to be.

The Australian Standard also recognises the weight of wearing a helmet and highlights that any helmet over 400grams shall be labelled to within 30grams. That means that a helmet marked as say 530 grams could be 530 to 560 grams. The current RFS helmet is under the requirements for this weight labelling.



## The Rules Rule

Now it's time to give you the results from a number of actual helmet tests.

RFS Engineering collected a number of helmets from various areas in the State. Five of these helmets were selected for testing. The helmets were manufactured between 1979 to 1994, meaning they were between 12 and 27-years-old. This was seen as a reasonable ideal cross-section of older helmets in the field and constructed under the previous two versions of the Australian Standard. The helmets were tested under the current updated version of the Australian Standard.

The five helmets were all put through a number of tests with two of the helmets put through further tests.

The main tests involved the shells and inner harnesses as all the other parts are replaceable or wearable items.

The tests were as follows:

- 1) Environment Conditioning for a period of at least two hours:-
  - a) Hot – at a temperature of 50 degrees Celsius,
  - b) Cold – at a temperature of minus 10 degrees Celsius,
  - c) Wet – total immersion in water at a temperature of 23 degrees Celsius.
- 2) Shock Absorption Test  
The impact of the striker shall not exceed 980m/s<sup>2</sup> (100Gs).
- 3) Penetration Resistance Test  
A 3kg conical spike is dropped on to the helmet from a predetermined height.
- 4) Prolonged High Temperature Stability  
Helmet is placed on a head form and set into an oven at 120 degrees Celsius for a period of four hours. The helmet shall show no signs of distortion.
- 5) Flammability Test  
Where a section is cut from the helmet and a flame is applied to it for a predetermined time then removed to see if the specimen burns.

## The Results

For the first test, all passed.

In the second, the helmets averaged 58Gs. Not bad when you consider that some of the helmets were 27-years-old.

In the third, all helmets passed.

The fourth, there was no deformation.

And finally the fifth, the helmets did not catch on fire, even with their age.



Not one helmet came close to failing in any of our tests. And they all handled the scary-looking spike impact without strain. In fact, two of the helmets were put through the same tests multiple times until they showed any signs of stress.

The insert photo above shows that the shell and the harness are designed to flex and that each part does their bit in absorbing some of the impact.

## How good is good?

In most cases the peak Gs in the impacts were lower than Australian Standard. As Julius Sommer-Miller (some of us remember him) would say - Why is it so? Because the impact flexes the thermo plastic helmet shell sooner in the impact, which lets the inner harness inside (the real energy absorber in the system) start doing its work sooner.

Conventional wisdom might say stiffer construction is somehow better at absorbing energy than flexible plastic.

Our results showed that the thermo plastic helmets actually perform very well, especially given that these are 12 to 27-year-old helmets.

Why is this? The thermo plastic shell flexes rather than crushes as it would in a stiffer construction, and this flexing, far from being a problem, actually lets the inner harness do its job of absorbing the impact and letting less impact to the head containing your jelly.

## 'SOME COMPOSITE HELMETS HAVE A SERVICE LIFE OF THREE TO FIVE YEARS'

From current information it would seem that some composite helmets have a service life of three to five years and should be inspected after every use. Unfortunately one of the downsides with composite is that if the outer coating is chipped or cracked it could absorb moisture, which could result in the softening of the composite structure.

## 'THERMO PLASTIC HELMETS ARE GENERALLY AROUND 30 PER CENT LIGHTER TO WEAR'

One thing to notice is that the thermo plastic helmets are generally around 30 per cent lighter to wear than stiffer constructed items.

## The Human Firefighter

"But I'm a firefighter" I hear you say. "I jump the tallest flames, can put out flames with little water, I can run into low level tree branches, have a head that can withstand any heat and I **don't** need a special helmet."

Well, you do - to protect that bit of warm jelly sitting above your shoulders.

The RFS require helmets that meet the RFS Specification which includes the Australian Standard as part of the specification along with certain other criteria and performances.

## 'REDUCE HEAD HEAT BUILD UP AND NECK STRAIN'

The helmets chosen by the RFS meet the requirements of protecting our heads from impact and heat, while endeavouring to reduce head heat build up and neck strain from a lighter constructed helmet.

The RFS and government agencies require the helmets to be independently third party certified and not just on the manufacturers, or seller's word that the helmet passes the Standard, as the Standard is only part of the requirement.

In conclusion, the current choice of RFS helmet meets all requirements and proved very popular with the volunteers during the last helmet assessment.



Left to right: Supt. Ian Stewart, Their Excellencies Major General Michael Jeffery AC CVO MC and Mrs Marlena Jeffery, Inspector Chris Palmer, Lt Paul Singer RAN, Joanna Gash, Alan Mulley

## GOVERNOR-GENERAL VISITS SHOALHAVEN

Story by Inspector Chris Palmer,  
Shoalhaven District  
Photos by Inspector Tim Carroll,  
Shoalhaven District

On Wednesday 16 May 2007, Governor-General of the Commonwealth of Australia, His Excellency Major General Michael Jeffery AC CVO MC and Mrs Jeffery visited the Combined Emergency Services Centre at Nowra to meet with students from the Shoalhaven Youth Volunteer Initiative (SYVI) Program. His Excellency's visit comes on top of the visit made last year by Prime Minister John Howard.

### 'MEET AND TALK IN AN INFORMAL AND RELAXED GATHERING'

Their Excellencies were hosted by Superintendent Ian Stewart and Inspector Chris Palmer. The purpose of the visit was to meet and talk with students who had undergone training with the RFS, National Parks and Wildlife Service, Surf Life Saving Association and NSW Police. Students from many of the local high schools had the opportunity to meet and talk with Major General Jeffery and Mrs Jeffery in an informal and relaxed gathering.

### Stars of the Shoalhaven Dinner

Following the event, their Excellencies were guests of honour at the Stars of the Shoalhaven Dinner. This is an annual event to recognise businesses for their service



The Governor-General takes time out to chat with students from local high schools

and support to the youth of the Shoalhaven area. This year the Shoalhaven Rural Fire District was a recipient of the Star Award for their continued support of the SYVI Program.

This award recognises the efforts of both the volunteers and staff involved in training students from four high schools as basic firefighters. Many of these students continue on and become a member of their local brigade.

### Praise given

His Excellency praised not only the SYVI program but also volunteers from all services across the nation. An extract of his speech sums up these sentiments.

"Another jewel in the crown for the region is the marvellous Shoalhaven Youth Volunteering Initiative, a program which

has been successfully running for the past five years, and from which, I understand, a template has been developed for other communities across the nation," said the Governor-General.

"More than 700 students have taken part in the program to date, and I am pleased to learn that many have subsequently become full members of the relevant agencies.

"In my role as Governor-General I have been fortunate to meet with thousands of people who make up our volunteer organisation. They are the backbone of this country; they underpin our economic and social well being.

"Volunteering not only teaches skills, but instils the sorts of values that are the very heart of Australia's reputation as a generous, compassionate and prosperous country."

## VOLUNTEERS TO WALK THE KOKODA TRAIL IN 2008

In 2008, a group of people will come together with two main things in common; the first, an involvement within the RFS, and the second, a desire to walk the Kokoda Trail.

### 'RETRACING THE FOOTSTEPS OF THE DIGGERS WHO FOUGHT IN THE KOKODA CAMPAIGN'

Having served in the Australian Army for three years in the late 1980s and maintaining an interest in this area, Region North Manager John Parnaby often wondered what the trek would be like. Then, several months ago, he mentioned the Kokoda to a few members of the RFS and before he knew it, was discussing the potential of retracing the footsteps of the Diggers who fought in the Kokoda campaign with the well-known Charlie Lynn.

Charlie, a Vietnam Veteran and former Army Major with 21 years service, has led over 40 expeditions on the Trail since 1991. He is arguably the most experienced Kokoda trek leader on the Trail today.

So, why would you want to spend 12 days trekking through Papua New Guinea? Well, the answer to that is in our history books.



### 'THE MOST DESPERATE LAND BATTLES EVER FOUGHT IN DEFENCE OF AUSTRALIA'

The Kokoda campaign featured some of the most desperate land battles ever fought in defence of Australia during the Pacific War, and the walk gives people the opportunity to experience some of this for themselves.

### Are you interested?

The trek will take place between April and September 2008, with an exact date to be advised. The walk will take 12 days and a lot of effort. Participants will get the opportunity to experience something that most people only ever dream about. Kokoda is about strength in adversity, courage and mateship.



For further information please email [john.parnaby@rfs.nsw.gov.au](mailto:john.parnaby@rfs.nsw.gov.au).



## BIG ED TOURS THE NORTH WEST

Story by Inspector John Kennedy, Community Safety Officer, North West Zone

The North West Zone/ Bogan District were privileged to have the community education appliance, affectionately known as Big Ed, tour the area for a week in late July.

### Big Ed visits ten schools

During the week, Big Ed visited a total of ten schools in the towns of Coonamble, Collarenebri, Lightning Ridge, Warren, Walgett and Nyngan.

With a total of 2,480km traveled and some 53.5 person hours being completed, it was definitely a highlight on the community safety calendar.

Additionally, 469 Year Three and Year Four students participated in the computer quiz and games onboard Big Ed, resulting in great excitement and fire awareness education across the area.

### 'STUDENTS PARTICIPATED IN THE COMPUTER QUIZ AND GAMES'

Due to the large number of students, each year was broken up into groups to interact with Big Ed, while the other groups were treated to fire awareness programs delivered by volunteer facilitators, local Community Safety Officers and Mark Fullagar.

From the feedback received, the students and teachers learned a great deal about the very important issue of fire awareness safety.

### Students try a fire hose

Students also took the time to look over an appliance from the local brigade using nozzles and spraying water, giving them a practical side of the visit, which was enjoyed by all who participated in this activity.



Brigade members from Wallacia RFB at the E-Safe Expo

## CHARGED UP FOR SAFETY

Story by Matthew Schroder

**R**FS volunteers from Cumberland and Macarthur Zones joined members from the Service's Business Development Unit to demonstrate their skills around electricity at the annual E-Safe expo held on 11-12 July 2007 at Rosehill Racecourse.

Working safely with electricity is something that confronts volunteers and staff of the RFS at every turn during everyday activities and even more commonly during emergency operations.

### A close finish

Four teams were drawn from across the industry and were judged on their safe manner and approach to extinguishing fire as part of a number of scenarios. The scenarios highlighted fires in areas such as a switchboard, areas of grass and in bins, with the Integral Energy team narrowly taking out first place with less than four seconds separating all teams.

**'THE CREW SAFELY AND SUCCESSFULLY APPROACHED AND CONTAINED THE GAS FIRE EVERY TIME'**

The volunteers of Cumberland and Macarthur



demonstrated their highly developed skills with a five person fog attack display. The crew safely and successfully approached and contained the gas fire every time.

### Workplace safety courses

The Business Development Unit offers a number of workplace safety courses which



cover dealing with fire safely at work. To highlight the dangerous combination of electricity and fire in the workplace the Unit hosted a field event for the first time.

The benefit of industry and emergency services coming together to create safer working environments cannot be underestimated and RFS teams are sure to again take part in next year's expo.



Dora Creek RFB Community Safety Assistants lend a hand - (L to R) George Dann, Robert Leech, Ian Wyber

## NEWCASTLE USES HOME SHOW TO PREPARE THEMSELVES

**O**ver 40,000 people attended this year's Home Show in Newcastle, with many taking the opportunity to visit the RFS display to seek advice on preparing their home against fire.

Attendees used the event to gain ideas for around the home, providing the organisation with a great opportunity to educate home owners on bushfire awareness around their property.

The RFS was situated in two great locations at the Home Show. The first was part of an external site which targeted community education using the Lakes Team community safety trailer along with a combination of community safety staff from the Lakes and trained CSA volunteers from Lake Macquarie, Wyong and Lower Hunter Zone.

### 'A GREAT OPPORTUNITY TO EDUCATE HOME OWNERS ON BUSHFIRE AWARENESS'

A second internal site focused on development control and bushfire



Ian and Robert share their knowledge with one of the Newcastle locals

assessment enquiries and was staffed by regional community safety and development control officers.

The resources on display showed the progressive nature of community safety, the

ability to use professional, interactive and illustrative aids further enhancing our ability to increase the Communities Awareness of fire safety messages.

## EMERGENCY SERVICES PERSONNEL READY TO TACKLE MT PANORAMA

By Inspector Greg Wardle, Chifley Zone

RFS personnel from Bathurst HQ, Eglinton and Rock Forest took part in the biggest police public order exercise ever held in Australia on Wednesday 1 August, 2007.

### Codename - Aroona III

Codenamed 'Aroona III', the exercise was developed to test the integrated Command and Control System within the NSW Police and other emergency services agencies involved with the V8 Supercars race held at Mt Panorama, Bathurst, in October each year.

Aroona III was designed as a field-based exercise using real resources in a simulated work environment at Reid Park on Mt Panorama. Planning for the multi-agency operation started six months prior and involved the combined resources of the NSW police, RFS staff from Head Office, Region and Chifley Zone, plus a number of other support services.

More than 400 police, NSWFB and other support agency services were involved on the day, including 15 RFS volunteers, five staff and four appliances. The operation began with a full personnel briefing at 1300 hrs by police officers, with the first of the activities beginning at 1500 hrs. In total, RFS and NSWFB personnel in attendance took part in four separate activities during the nine-hour event.

The first scenario involved a simulated race in which a car left the track and overturned into the crowd before catching fire and injuring a number of spectators.

The second exercise was a structure fire attended by two RFS appliances with support from the NSWFB.

A car 'doing doughnuts' before crashing into a power pole, bringing down lines, causing the car to catch fire and trapping a person was the third major scenario.

The final exercise for RFS crews was a large bonfire that had been set alight resulting in serious burns to a number of race fans.

### 'THE RFS LEADS THE WAY IN THE MANAGEMENT OF LARGE SCALE EMERGENCIES WITHIN NSW'

The RFS and NSWFB worked together professionally for this exercise, both at a staff and volunteer level. All RFS volunteers conducted themselves in an exemplary manner they should be proud of. It was very clear to many that the RFS leads the way in the management of large scale emergencies within NSW.



Below: Tony receives his medal from Superintendent Trevor Reeves

## PRESTIGIOUS AWARD FOR MURRINGO VOLUNTEER

One hundred residents of the Murringo community, both past and present, gathered at the Murringo Hall on Friday 8 June to congratulate and celebrate the contribution made to the community by local stalwart, Mr Tony Young.

Brigade Captain of the Murringo Rural Fire Service, Peter Parkman told the gathering of Tony's amazing commitment to community life and his never ending service to sporting, youth and welfare organizations throughout the Young and Murringo areas. Peter particularly highlighted Tony's service to the Murringo Rural Fire Service and the Murringo Community Association.

Tony's time as a fire service volunteer began in 1944 when he helped fight the "biggest fire in his lifetime" which broke out to the east of Murringo. He fought the blaze with only a wet bag and a kerosene tin full of water.

During his 63 years of service to the local Brigade, he held several Executive positions including that of Brigade Captain for 16 years, Village Captain for five years, Deputy Captain, Permit Officer and various other executive roles. At the age of 76, Tony still holds the position of Senior Deputy Captain and is still very active in brigade life.

Tony was presented with a gift of appreciation, which included two tickets for a Sydney Harbour Bridge Climb. The highlight of the evening was undoubtedly the presentation of a National Medal to Tony from the Manager for the South West Slopes Zone, Superintendent Trevor Reeves.

## NEW PATHWAY FOR VOLUNTEERS

The RFS in partnership with the Rural Fire Service Association (RFSA) conducted information forums for 145 volunteers who have considered a paid career in the Service. The two-day forums were held in each region between June and August. They contained a range of information volunteers needed to be aware of, particularly relating to what the organisation does and how best to apply for a job.

The forums were held in Dubbo (16-17 June), Wagga Wagga (30 June and 1 July), Armidale (14-15 July) and at Homebush (25-26 August).

The program for the forums included talks from staff in the four main functional areas of the Service; operations, community safety, learning and development and business management, who shared information on their business. HR staff discussed temporary employment, traineeships, expressions of interest, learning and development options and qualification expectations. Detailed information on the recruitment processes including two short training sessions on



how to write a job application and interview techniques were included on the second day.

The forums were a huge success, as judged by the comments below, and talks are now underway as to how often they should be run in the future:

"It gave us an insight into the roles within the RFS – I discovered there are more jobs in the Service. The days provided an opportunity to liaise with the management team and salaried officers."

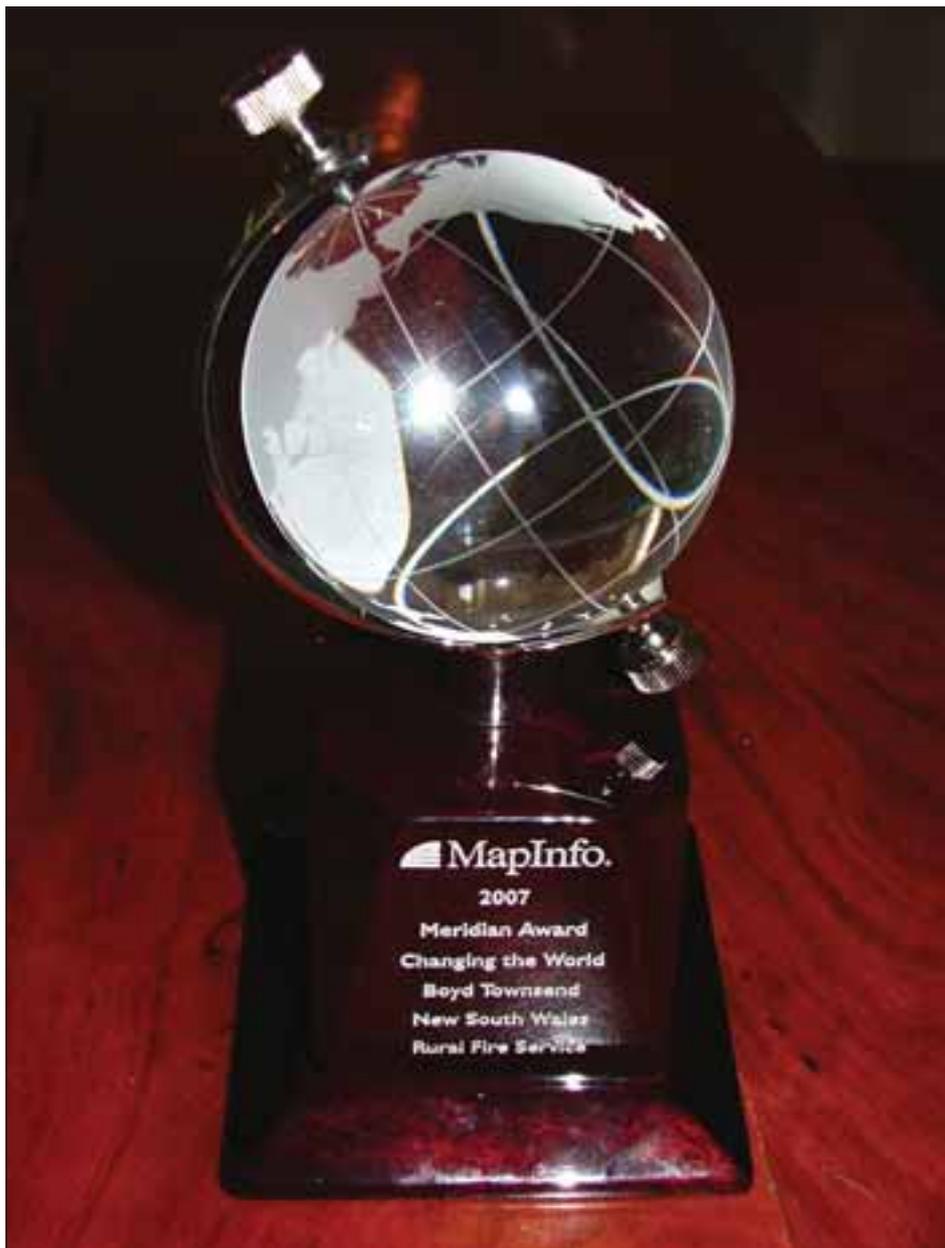
"Concise information on the recruitment process was very beneficial, providing

constructive and valuable insights into the selection process."

"It was good information - presented in easy to understand ways.

This should be done annually to benefit more volunteers. I would recommend anyone that aspires to seek employment to get involved in a seminar like this."

"I wish it had been around ten years ago. It was one of the best weekends I've spent with the RFS."



## RFS RECEIVES TOP GONG FOR CHANGING THE WORLD

**T**he RFS has won a prestigious award for 'Changing the World' through the development of two new significant software applications at the 2007 MapInfo Meridian awards, held in Seattle, USA.

The two new programs will assist the RFS with mapping and monitoring fires from the ground and air. They were developed with a view to delivering systems that were relatively simple to use and in order to deliver map-based intelligence as quickly as possible.

### MapDesk

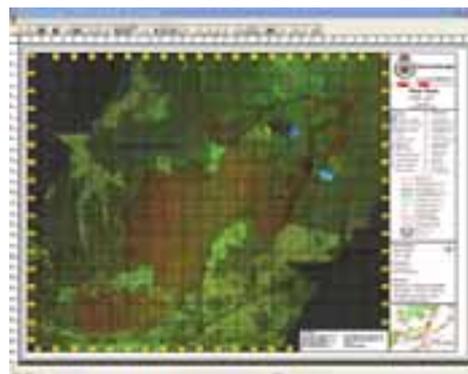
The first program, MapDesk, is a desktop solution designed for use in a Fire Control Centre to produce a range of map products for the Incident Management Team and for firefighters in the field.

### HeliFIRE

The second application, known as HeliFIRE, is designed for use on a laptop connected to a GPS unit and operated from an aircraft to accurately record a range of fire-related information. This can include anything from mapping the exact fire line through to the location of various points such as threatened properties, water points etc.

Both applications use the powerful MapInfo Professional platform and are stand alone applications not reliant on an internet/intranet connection to operate. In addition, both applications provide the ability to upload fire map information directly into ICON (Incident Control Online). All sitreps from notifiable incidents are recorded in ICON, which also assists in the efficient production of Incident Action Plans (IAP) and communications plans as an incident develops.

The development of these applications has been a collaborative project between key sections of the RFS, including GIS



and Information Services, and was led and facilitated by Northern Rivers Community Safety Officer, Superintendent Boyd Townsend.

Each year, Pitney Bowes MapInfo Corporation presents awards globally in five different categories for innovative applications developed using MapInfo Products.

### A trip to Seattle

In May of this year, Boyd travelled to Seattle on behalf of the RFS to receive the award and also attend the 2007 Map World Conference and Developers Summit, which was organised by Pitney Bowes MapInfo Corporation as part of the award.

"It was a great privilege to represent the Service throughout the entire Conference and Developers Summit," said Boyd.

"It was an amazing opportunity to meet people from a range of industries, which varied from large retail, telecommunications and banking organisations using spatial information for a variety of purposes through to law enforcement and anti-terror agencies.

"It was also an amazing opportunity to work with Pitney Bowes MapInfo engineers and other very experienced developers during the Development Summit to learn more about application development and specifically how to make improvements to the MapDesk and HeliFIRE applications from a technical aspect. Some of these improvements have already been introduced into the applications for the 2007-08 fire season."

Congratulations to Boyd and the rest of the team involved with this important project.

## BALRANALD FAREWELLS A LOYAL MEMBER

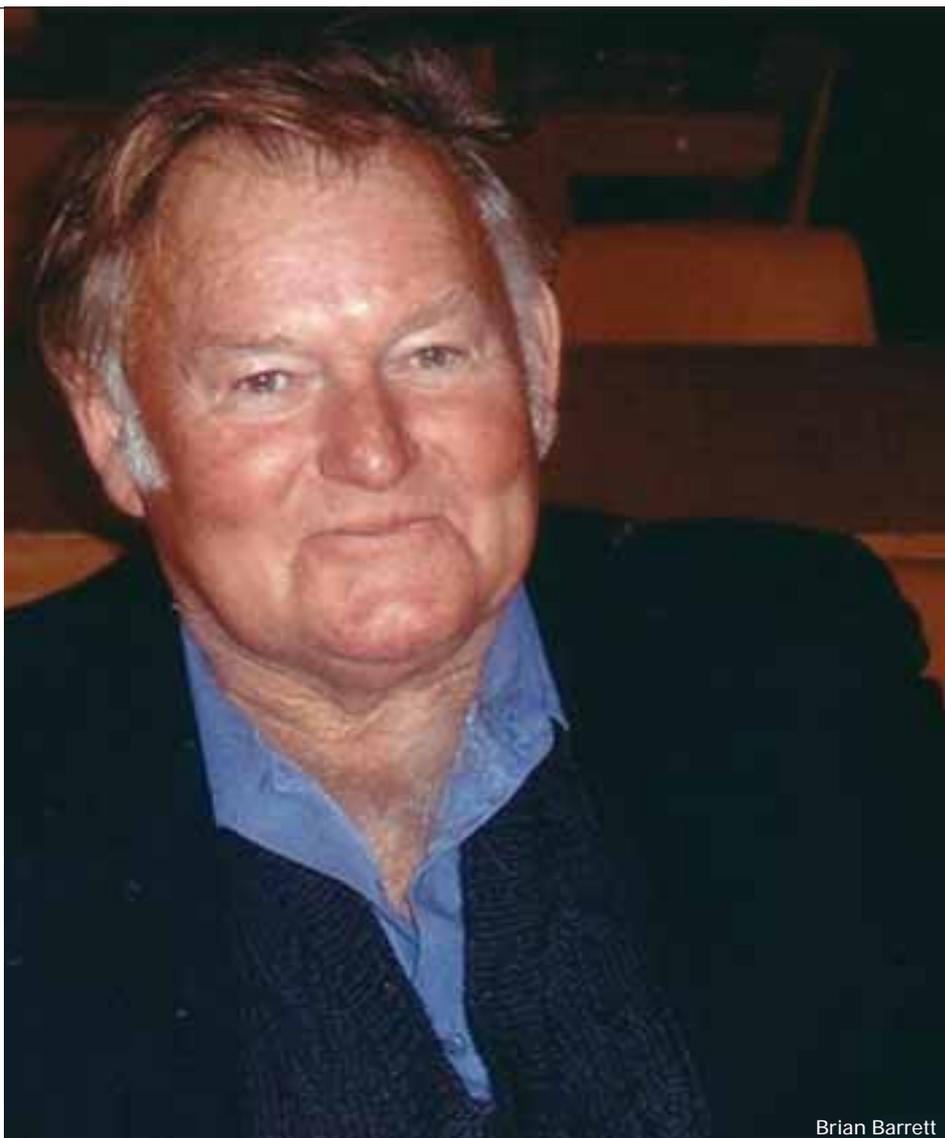
**B**rian Barrett became an active member of the then Balranald Bushfire Brigade when he moved to Mayfield in around 1970. During his 20-plus years in the Service he attended many major fires including the 1976 Mayfield fire, the Oxley pub fire in 1977 and a 50,000 ha fire that started in the Humewood region in 1979.

Brian never failed to show his true character and constantly provided leadership in times of adversity. He gave selflessly of his time and resources to help those in need, and along with his family, provided all the resources they could muster to assist whenever Mother Nature's fury was at its peak. It was of no consequence to Brian whether the fire was in his Brigade area or a neighbouring one. He willingly provided graders or utes or whatever else he could get his hands on to aid the cause.

Brian's record of service is impressive to say the least. He was appointed Captain of what is now the Freshwater Brigade in 1981, and was then additionally appointed a Deputy Group Captain of the Balranald Rural Fire Service in 1988 - remaining in these positions until his recent passing on 25 June this year.

As a result of this distinguished service, Brian was awarded the RFS 25 year Long Service Medal in 2004.

To Gwenda and the rest of the family the RFS extends its heartfelt sympathy in their time of sorrow on behalf of a very grateful community.



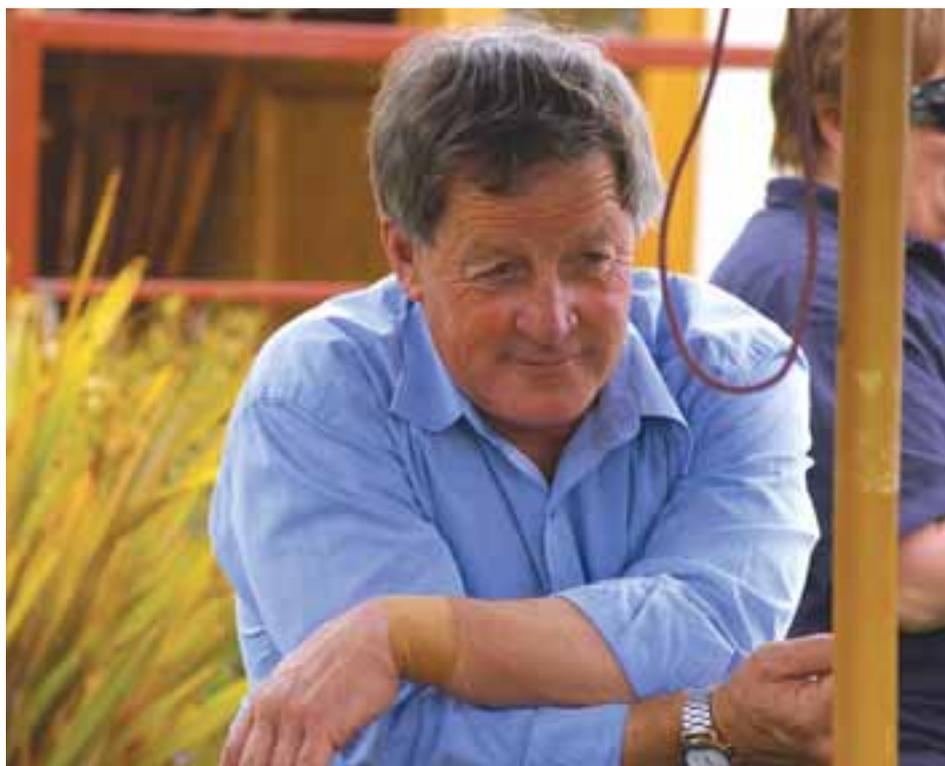
Brian Barrett

## LENNY THOMPSON SIGNS OFF IN MONARO

**R**F S Learning and Development (L&D) Officer Lenny Thompson retired in September after a wonderful career spanning almost 40 years.

Lenny started with the Service as a volunteer with the Ingebyra Brigade in the Snowy River District in 1968. Over the years, Lenny has held a variety of positions ranging from Captain and Group Captain, through to his current role as President of the Brigade. In a salaried capacity, Lenny began work with the RFS as an Honorary Deputy Fire Control Officer in 1993 before eventually moving to the L&D department in the Monaro Team, located south of Canberra.

Lenny will be sincerely missed by the many people he has met and worked with over his impressive career. Thankfully for the Service, Lenny will remain involved as a volunteer and we will no doubt still have the pleasure of talking to him during his retirement.



# RFS EVENTS FROM JUNE TO AUGUST

## JUNE

### June 2

- Gwandalan/Summerland Point 50th Anniversary  
Kanangra Drive, Gwandalan

### June 16

- Ridgeway 10 year Anniversary  
Queanbeyan Kangaroo's Rugby Leagues Club

### June 23

- RFS Conference  
Mudgee

### June 30

- Tweed/Ballina National Medals and Long Service Awards  
Tweed Fire Control Centre

## JULY

### July 3

- Official Opening of the Liverpool Ranges Zone office and the opening of Warrah Creek Brigade, Blackville Brigade, Caroonna Brigade and Currabubula Brigade.

### July 24

- Wyong tanker handover and presentation of cheque to catering brigade.

### July 28

- Cumberland Zone Ball  
St Mary's Band Club

## AUGUST

### August 4

- Wiseman's Ferry RFB Station Extension Opening

### August 9

- Canobolas Zone-Sod Turning for New Fire Control Centre and Training Centre. Handover of Tankers and Handover Group Vehicles (The Hon. Kayee Griffin, Duty MLC representing Minister for Emergency Services The Hon. Nathan Rees)

### August 11

- Taree District Championships  
Taree Showground
- Community First Responder Program - Graduation Ceremony  
Blue Mountains

## AUGUST

### August 15

- Ivanhoe and Wilcannia Fire Control Centre Opening

### August 18

- Lower Portland Station Opening and 50th Anniversary
- Hastings National Medals and Long Service Awards  
Wauchope Fire Control Centre

### August 24

- Shoalhaven National Medals and Long Service Awards  
Shoalhaven City Council

### August 25

- Hornsby Ku-ring-gai Communications Brigade 25th Anniversary  
Barker College, Hornsby

### August 26

- Hawkesbury Championships, tanker handover and awards presentation

### August 28

- Maryrungle Station Opening

### August 29

- Wingecarribee National Medals and Long Service Awards  
Wingecarribee Fire Control Centre

Region South Group Officer Conference 2007



Wilcannia medals ceremony

Far North Coast medals ceremony



Canobolas sod turning ceremony

Hastings medal ceremony



Wilcannia Fire Control Centre opening

Wauchope - Blessing of the Fleet

# WORLDFIRE



## GREECE COUNTS THE COST OF MASSIVE FOREST FIRES

**G**reek residents on the Peloponnese peninsula have begun the clean up after massive forest fires ripped through their area, killing 63 people and leaving many more homeless. The government has blamed arsonists for many of the fires and have arrested 30 people, with many locals telling the Agence France-Presse that they believe the fires were started in parched forests to clear land for unauthorised construction.

Environmentalists said poor upkeep of the forests and an ill-equipped fire service had exacerbated the catastrophe. A massive international firefighting force backed by water-bombing planes and helicopters from more than a dozen countries worked night and day to extinguish the fires. In some rural areas where fire wiped out olive groves and herds of animals, residents said they feared a way of life that had endured for centuries had been lost forever. In the Peloponnese village of Makistos, reached by a road littered with burned-out cars, 48 of the 75 houses and both of the churches were destroyed.



## MOWING STARTS FIRES

**L**ong-time Bushfire Bulletin reader, John Harris from California has drawn the magazine's attention to a new contraption being used in his County to combat grass fires, started by of all things, mowing.

San Bernardino County is kept busy with grass fires caused by sparks from industrial lawn mowers working along highways and has finally come up with an invention to hopefully manage the problem.

The County has tried several preventive methods, but have now put their efforts towards extinguishing the highway fires. To do this they have installed a stored energy Compressed Air Foam System (CAFS) on the tractors, along with a discharge nozzle on the mower head.

A stored energy CAFS only uses air from compressed air cylinders to operate the unit. San Bernardino selected a 113.5 litre CAFS manufactured by Burner Fire Control. The unit is mounted in a way which allows it to function with the hydraulic mower



arm and still be out of the way of normal operations. The CAFS unit can also be used to help control other types of fires.

## CHINA'S PING PONG DREAMS OF GOLD SAVED BY FIREFIGHTERS

**B**eijing firefighters prevented a catastrophe on 2 July when fire broke out at the nearly completed table tennis venue for the 2008 Olympics.

Damage was limited and there were no casualties at the elite Peking University in the northwest district of the Chinese capital where the 8,000-seat building is located.

With the Games now less than a year away, 17 crews rushed to the scene to extinguish the fire, which is believed to have started by a workman using an electric welder.

China has won all but one table tennis gold medal at the Olympics since 1996.



## FIRE ACCIDENTLY SETS STATION ALIGHT

**F**irefighters got a big surprise when the alarm went off at Devonport fire station in New Zealand. The flames were coming from inside their own building. The alarm rang out at 2215 hrs on 17 August at the station after a fire began in one of the bedrooms.

A firefighter hung a towel on the back of a chair in front of an electric wall mounted heater. The towel caught fire and then the fire spread to the bedding, curtains and carpet.

Firefighters say no one was in the bedroom at the time of the fire and the door was closed.

The heat from the fire activated the sprinkler system which contained the flames to the bedroom.

The sprinkler system also triggered the alarm which alerted firefighters who quickly put out the fire.



## PUSH FOR 'FIRE-SAFE' CIGARETTE BURNS BRIGHTLY

**T**he number of fire-related deaths and injuries throughout Europe could be dramatically reduced in the near future if the European Union's consumer chief succeeds in making all cigarettes sold in European Union (EU) countries self-extinguishing.

The 'fire-safe' cigarettes stop burning automatically after a few seconds if not puffed, due to small gaps in the cigarette paper which cuts the circulation of oxygen. "Data from just 14 member states show that over 2,000 deaths a year are caused by cigarette-related fires, with thousands more people injured and tens of millions of euros worth of damage caused," a Commission official told Reuters.

"Canada introduced legislation in 2005 and a number of US states have followed suit including New York, New Jersey and California, while Australia intends to also bring in laws for fire-safe cigarettes," another Commission official said.

Previously tobacco firms said chemical additives required for fire-safe cigarettes would cause more damage to smokers and complained that smokers would not like the new taste.



## JAPANESE MAN CALLS FIREMEN 388 TIMES

**A** Japanese man arrested for making 388 prank phone calls to the local fire station between May 2006 and July this year said he did it because he was lonely.

"I live by myself and I was sad. I like the fire services and the police so I called them. I wanted them to come and look after me," the 58-year-old man was quoted as saying by the daily Yomiuri newspaper.

A police spokesman in Saitama prefecture, north of Tokyo, said the man had been arrested on suspicion of obstructing the emergency services.

The Yomiuri newspaper said the man would phone the fire station shouting "Fire! Fire! I've set gasoline and kerosene alight!".

After one such call in early July, local emergency services dispatched ten fire engines, one ambulance and 35 firemen to the man's house it was reported.

# TRAINING

## WET WEATHER TRAINING

By Dan Meijer, Learning and Development Officer

**W**e've all had the experience of a planned training day being interrupted by the weather, especially as 'training season' is autumn and winter. In this issue, we'll look at some ideas on how you can run a constructive brigade training session even when it's bucketing down.

It's a fact that cold, wet weather leads to plenty of village fire incidents, including house fires resulting from the dangerous use of heaters and MVAs due to wet roads and poor visibility, to name a few. Conducting drills and practice scenarios in the rain therefore mirrors reality for village brigades and CABA operators, but it's unlikely to win the Training Officer many friends and doesn't really apply to rural brigades who have no village responsibility.

Instead, if your scheduled brigade training session turns out to be one of those wet days (and we certainly need more of them), have some backup plans for indoor training which are interesting and constructive.

### Mapping exercises

It's really easy to give people a list of grid references and get them to plot a bearing between them. It's also pretty boring. A better idea is to take a map of your local area, note a couple of usual observation points (an intersection, a fire tower, a hill with a property on it, etc) and give the members a made-up weather report and sitrep, similar to "smoke sighting, bearing 123 degrees from location A and 456 degrees from location B". Have the trainees triangulate on the map to determine the likely location of the smoke. They should then use their maps to determine the type of terrain and fuel that the fire is burning in, and use their McArthur meters to determine the likely fire behaviour now and in the future. Officers can then consider how they would approach the fire, what action they might take given the predicted behaviour,



and practice briefing their crews. Crews can identify likely hazards in the area for that type of fire, and how they might ensure that they're working safely. All members can look at resources in the area such as nearby water sources, and discuss what skills they might need to suit the plans that the Officer comes up with.

### Communications Exercises

This is usually possible when you have a good turnout of CL and AF qualified members. Write down some points on paper that can represent what a crew sees when they get to the scene of a fire. Using fireground radio channels, have members situated in different locations, and have each one assume a fictional callsign. You might act as FIRECOM, and go through an exercise of calling the "units" to "respond" to a simulated incident. The first-arriving officer can assume CONTROL, establish fireground communications, and manage the other "units" as they arrive. FIRECOM may then tell CONTROL that units need to be released for response to other incidents, etc. This gives members practice in moving between radio channels, changing callsigns and chains of command, and reorganising on the run.

### Video and Review Night

Contact your local L&D Officer and see if

they have any fire-related videos available to borrow, and get your members to meet at a suitable location with a TV and video. You can also plan this in advance, as the RFS Library has around 600 videos and about 30 DVD's available for loan to volunteers. Topics range from basic bushfire behaviour to advanced structural firefighting topics, news reviews of campaign fires, and 'how to' videos dealing with going to car fires, Hazmat incidents, and a range of other topics.

To borrow from the RFS library contact Librarian, Megan Jones, on 02 8741 5455 or email your request to [RFS.Library@rfs.nsw.gov.au](mailto:RFS.Library@rfs.nsw.gov.au). The librarians can assist you to identify relevant items in the collection suitable for your topic.

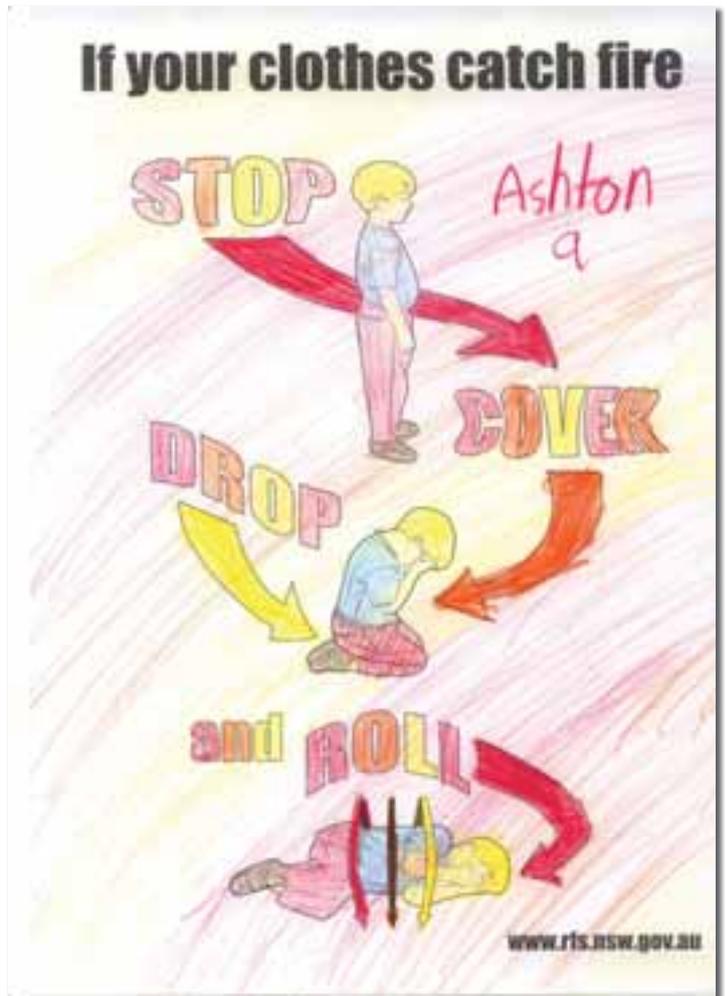
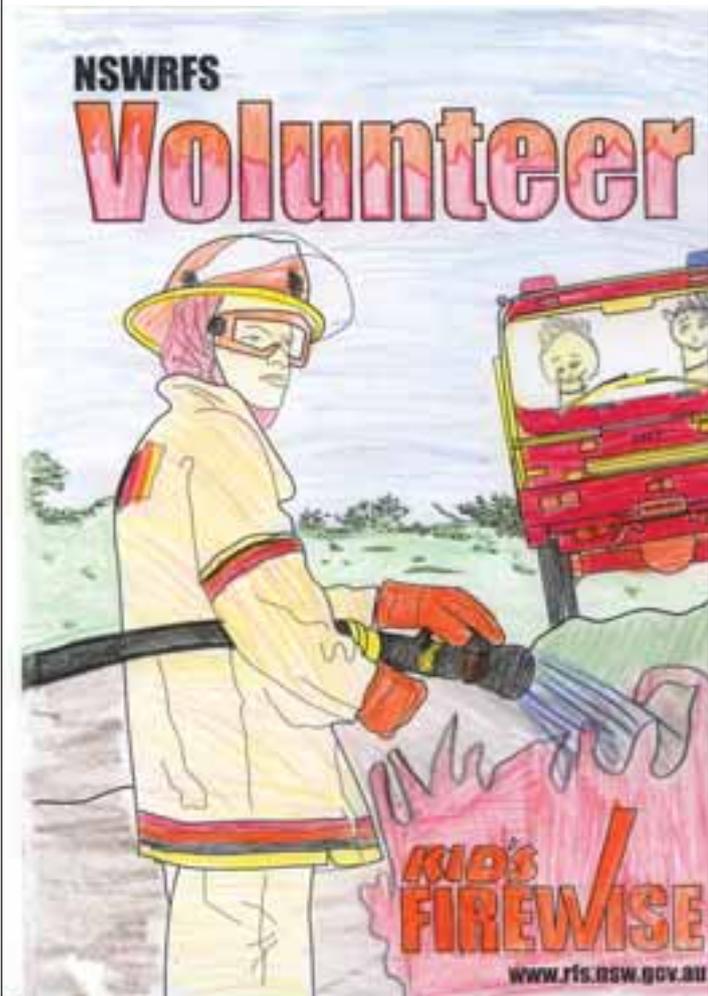
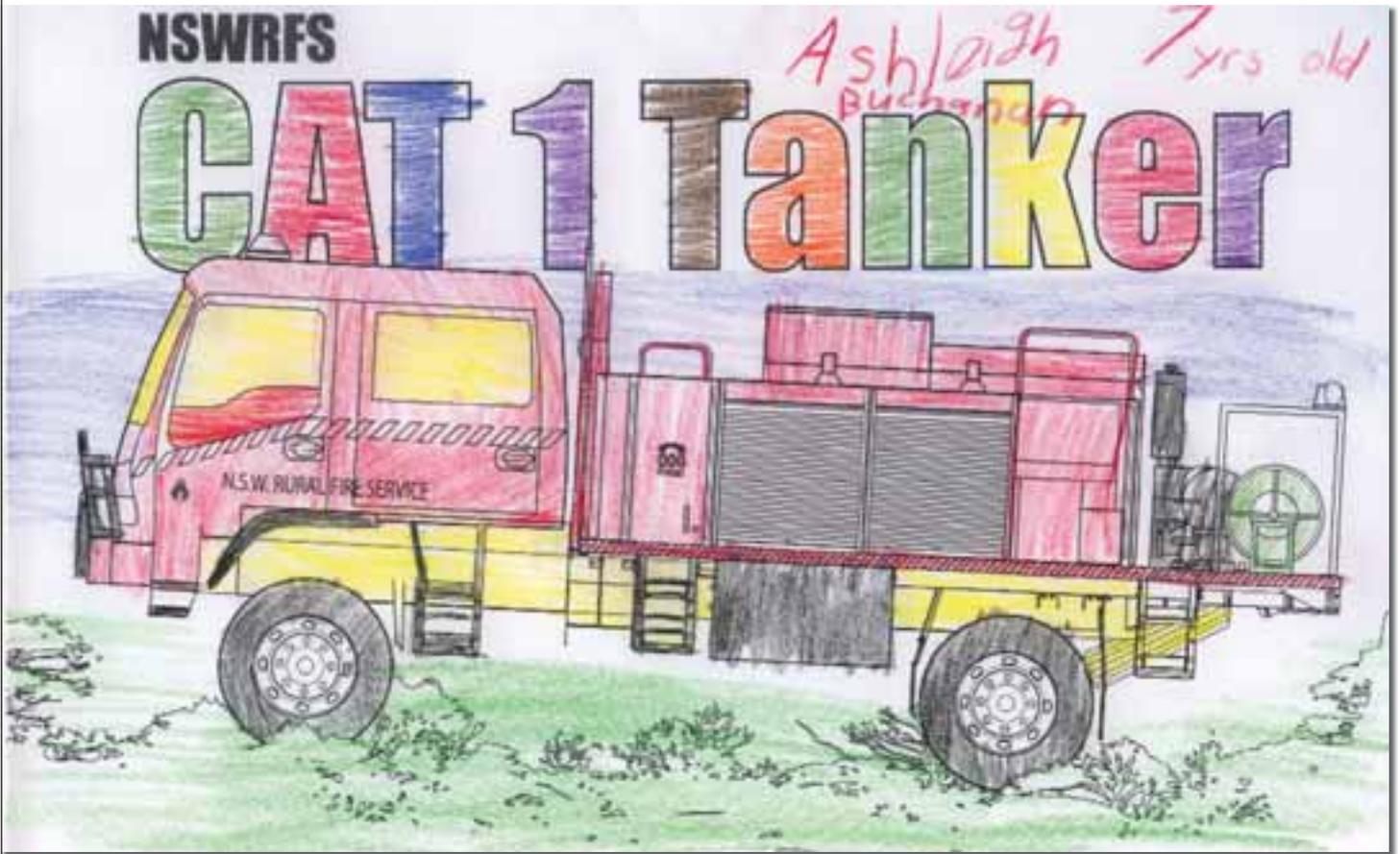
As well, the video catalogue is available for volunteers to search via the library website on MyRFS. If you would like assistance in accessing this service on MyRFS contact the library.

You can combine a video night with an After-Action Review (AAR) of some recent incidents that the brigade has been to. If you don't have anyone with AAR skills, your L&D Officer might be able to recommend a member from a neighbouring brigade. AARs help you analyse what you set out to do, what actually happened, why that happened and what you can do to improve in the future.



**ROLLING OUT AT  
THE WARRINGAH/  
PITTWATER  
FIELD DAY**

# FOR THE KIDS



# FIREWISE<sup>™</sup> Fact

Get on the web to protect yourself from bushfires.

**[www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)**

## Teach Mum and Dad about fire safety ahead of the fire season!

Did you know that the RFS website is jam packed with fire safety information? Follow the 'Publications' link on the right-hand side of the front page, and then click the 'Student and Teachers' link.

The Students and Teachers area is great for finding information for school assignments focusing on fire-related science. If you need further assistance with projects, you can also contact the webmaster, who will forward your email on to a staff member happy to help with your enquiry (use the 'Contact Us' page to send an email).

There are also downloadable resources for teachers such as 'FireSafe 1, 2 and 3' and 'FireScience 1 and 2'. These resources are accessible to everyone and contain fun activities and crosswords!

The RFS website holds lots of fun and educational information to help your family prepare your home ahead of the Bush Fire Danger Period (October 1 – March 31).

Write to us and include a drawing of you and your family preparing your home against bushfires. You might see your drawing in the next edition, and the best drawing will win a special RFS prize pack!

Send drawings and letters to: Bushfire Bulletin, Locked Bag 17, Granville NSW 2142.

Alternatively, email us at [Bushfire.Bulletin@rfs.nsw.gov.au](mailto:Bushfire.Bulletin@rfs.nsw.gov.au)



## Have you ever wanted your very own bushfire helmet? Well, now you can!

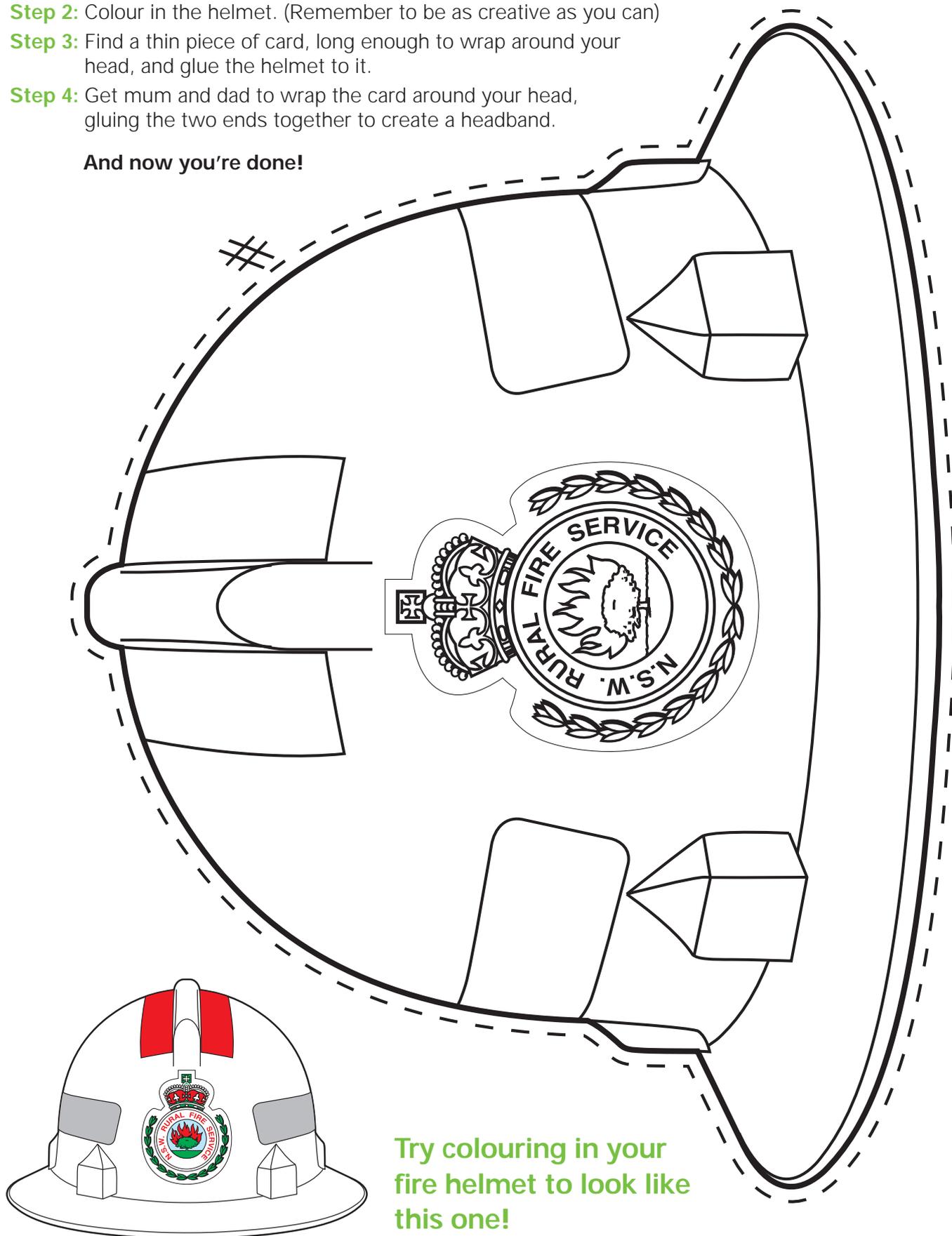
**Step 1:** Cut out the helmet around the dotted lines (ask mum and dad to help with the scissors!)

**Step 2:** Colour in the helmet. (Remember to be as creative as you can)

**Step 3:** Find a thin piece of card, long enough to wrap around your head, and glue the helmet to it.

**Step 4:** Get mum and dad to wrap the card around your head, gluing the two ends together to create a headband.

**And now you're done!**



Try colouring in your fire helmet to look like this one!

# SPOTFIRE!

## YETHOLME FIRE STATION TREE HIT

By Greg Wardle, Chifley Zone

On Saturday 4 August 2007, a large tree from a property next to the Yetholme Fire Station, east of Bathurst, came down during high winds, destroying the Brigade's two-bay station.

### IT TOOK MEMBERS SOME TIME TO REMOVE THE CAT 2 TANKER

The incident was discovered by a member of the Brigade at around 1200 hrs. Both the Brigade's appliances were in the station at the time and it took members some time to remove the Cat 2 tanker. The station's new Cat 7 wasn't as lucky however, and was trapped underneath the fallen gum having suffered noticeable damage.

### AN AREA KNOWN FOR ITS FORESTRY PINES

The Station was first opened in 1991 and is vital to the Chifley Zone. The Brigade is located halfway between Bathurst and Lithgow in an area known for its forestry pines and respond to a lot of motor vehicle accidents in the area.

The Brigade are devastated by what has happened to their beloved station, particularly as the extent of the damage forced the station to be pulled down.

Talks are currently underway with local council for a replacement station to be built.



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# WIN \$500 WORTH OF GREAT GEAR FOR YOUR BRIGADE!

## How would you like to reward your brigade with some new equipment by having your story or photo published in the Bushfire Bulletin?

Throughout the year, RFS members from across NSW send in amazing stories and photos to the Bulletin depicting scenes of heroism, community spirit, despair and mateship.

To reward volunteers who contribute these captivating stories and photographs, the RFS will award two x \$500 equipment packs to brigades who send in the most dynamic story or photo as judged by the editorial team.

The best thing of all is that the winner and their respective brigade get to choose their prize by visiting [www.myrfs.nsw.gov.au](http://www.myrfs.nsw.gov.au) for a full list of items!

### What can my brigade win?

Winners can select from a range of items to make up their \$500 prize pack including: weathermeters, firefighting equipment, DVD/VHS recorder combos, fire blankets, tripod lighting kits and even new bushfire

boots and wet weather jackets!

### What sort of content should we submit?

Whether it's a story you have written about a local volunteer who is making a difference in their community, or what it means to be a volunteer, or even an amazing photo a member of your brigade has taken of a structure fully involved in fire, we would like to receive individual brigade contributions to YOUR magazine.

And don't forget the most important part of all - the RFS will publish the very best stories and photos in a future issue of the magazine.

### How do we enter?

Submitting your contribution is easy! Simply, email your story or photograph to [Bushfire.Bulletin@rfs.nsw.gov.au](mailto:Bushfire.Bulletin@rfs.nsw.gov.au) and be sure to read the next issue of the Bushfire Bulletin to see if your brigade has won!

**Terms & Conditions** • You must be a registered RFS volunteer to be eligible for the prize pack. • Up to Two (2) \$500 prize packs will be awarded per issue for the best stories and/or photos. • Entries not selected to win a prize may still be published in the Bushfire Bulletin. • Brigades can select their prize/s from a set list of products provided by the RFS to the maximum value of \$500. • Contributors must gain any appropriate permissions regarding copyright before submitting a story or photograph. • Prize pack winners are at the discretion of the Bushfire Bulletin editorial team and all decisions are final. No correspondence will be entered into.

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