BUSHFIREbulletin

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Cover photo
By Lesley Ford: RFS volunteers work on containment of the Wandoo Fire, Wagga Wagga. See full story on page 17.

OUR **VALUES** UNDERPIN ALL OUR ACTIONS

FOREWORD

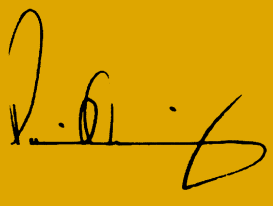
Thankfully, the 2005/06 fire season is now behind us, and while not as bad as others this decade, it did bring some very difficult and dangerous conditions which put hundreds of homes and properties under threat and tested our volunteers.

In total the season saw 22 days of Total Fire Ban brought on by extremely hot, dry and windy weather conditions – including the hottest New Years Day on record. I spent that New Years Day with firefighters at Gosford, fighting a string of fires threatening suburbs around Woy Woy on the Central Coast, and those were amongst the worst conditions I have experienced. At the same time our volunteers were fighting a very fierce and fast running grassfire at Junee. It was a very testing day, but thanks to the incredible efforts of the crews at these and other fires only a handful of properties were lost.

But NSW was not the only state to suffer from fires this year. Both South Australia and Victoria were hit by extreme weather, and, with their own resources stretched to the limit, asked the RFS to send assistance. This began the biggest interstate deployment of crews and resources in the Service's history. Working in unfamiliar terrain and in many cases unfamiliar vehicles our volunteers did sterling work, providing assistance to many brigades that have in the past come to help us out when we have been in need.

There is more on the major fires of the 2005/06 season and on the interstate deployment inside this edition of the Bushfire Bulletin.

Also this year has seen some discussion of exactly how many volunteers there are in the RFS. Some people would suggest that only active firefighters are worthy of being called RFS volunteers. The Service takes a broader view. We see the contribution of the communications crews, caterers and other supporting units as every bit as important as that of our firefighters. Our volunteers give as much of their time as they can, in whatever way they can – that contribution, great or small, is what makes a volunteer, not some meaningless classification on a sheet of paper. Our volunteers, all 70,000, have dedicated themselves to protecting their communities and, as we have seen once again over the last season, they are doing that very, very successfully.



Phil Koperberg AO AFSM BEM
Commissioner

SECTION 44 FIRES

GRASSFIRE SPREADS 38KM IN NEW YEAR HEAT JUNEE SECTION 44 - "JAIL BREAK INN"

1 January 2006 to 6 January 2006
By Supt. Joe Knox, RFS Riverina Manager and Rebel Talbert, RFS Media Officer

Extreme weather conditions. That was the forecast for New Years Day 2006, and a Total Fire Ban had been declared for the Eastern Riverina Fire Area.

The Riverina Fire Control Centre was opened at 0830hr. Weather conditions at the time included a temperature of 36.5 degrees, relative humidity of 25 per cent and winds peaking at 24kph. The weekly radio check was conducted and many operators expressed their concerns about the current and predicted weather conditions should a fire start.

The weather continued to deteriorate during the day. At about 1300hr a fire call was received to a fire in the Junee area. It was determined that the fire was near the Jail Break Inn, a café on the intersection of the Olympic Way and Goldfields Way, 8km west of the Junee township.

TEN HOMES, FOUR SHEARING SHEDS, 1500KM OF FENCING DESTROYED. STOCK LOSSES: SEVERE

The fire which broke out on Sunday 1 January 2006 burnt out about 25,000ha in Junee Council area and affected 200 properties, with 10 homes destroyed. Four shearing sheds were burnt out, a large amount of hay and silage was destroyed, several headers were destroyed, about 1500km of fencing was severely damaged and about 20,000 sheep and 100 cattle were killed.

In total 660 firefighting personnel in 116 fire tankers from the RFS, NSW Fire Brigades and National Parks and Wildlife Service worked on the Junee fire, supported by 10 aircraft, nine heavy plant and numerous support personnel.

Day 1 Sunday 1 January 2006

1300hr
Reports of a fire were received by Firecom at about 1300hr at which stage the origin of the fire was determined as on the eastern side of the Goldfields Way adjacent to the Jail Break Inn. Pagers and SMS were immediately activated to alert Yathella, Old Junee, Marinna and Junee Headquarters Rural Fire Brigades (RFB).

First reports from the scene indicated that the fire was burning in a lucerne paddock directly to the east of the area of origin. Holding the fire proved to be unachievable and the fire spread to both sides of the Olympic Way. As the fire rapidly increased in size, requests for additional units were made to Firecom from the fireground.

Initially these were sourced from neighbouring brigades and progressively from brigades within Junee District and then brigades from within the RFS Riverina Zone. Further units attended from neighbouring zones plus local and adjoining NSW Fire Brigades (NSWFB) and National Parks & Wildlife Service (NPWS) appliances. A number of private firefighting units assisted crews both on their own and neighbouring properties.

1400hr
The fire travelled quickly to the east engulfing farm land, threatening homesteads and the township of Junee. Police evacuated some residents in Junee to the local Bowling Club.
A Section 44 was declared at 1540hr for Junee Shire and RFS Riverina Zone Manager Superintendent Joe Knox was appointed Incident Controller.

Junee feels the heat

At about 1400hr and for some time after, the fire impacted on the Junee township. Resources concentrated mainly on property protection during this phase. The fire also travelled south of the town, continuing to burn farmlands.

The majority of residential property destruction and damage occurred at this stage. Ten homes and four shearing sheds were destroyed along with about 20,000 sheep, 100 cattle and 1500km of fencing.

The fire continued in a generally easterly direction with both ground and aerial resources concentrating on residential property protection. Rural landholders were attempting to move stock to refuges and met with mixed success.

The Incident Management Team (IMT) scaled up and a range of strategies were taken into account, at this stage the main strategy was protection of life and property.

Signs of success

Various control lines were considered during the fire with the first being Harefield Rd, though responding tankers were unable to reach the area before impact. The next north/south road to be considered was the Bethungra Gundagai Rd. As the fire approached this road later in the day firefighters met with some success.

Previously hazard reduced areas between Junee and Illabo on the main southern rail line proved invaluable and resulted in only one major spot over on this northern flank.

1600hr
At about 1640hr a front moved into the area from the west which increased wind speeds and shifted the wind direction 45 degrees towards the north. This change had been expected and firefighters were prepared.

As a consequence, some areas particularly to the west of Junee experienced little

The Jail Break Inn Fire burns towards properties on the edge of Junee. Photo by Brett Makeham

WEATHER CONDITIONS ON NEW YEARS DAY 2006 WERE PREDICTED TO BE EXTREME AND A TOTAL FIRE BAN HAD BEEN DECLARED FOR THE EASTERN RIVERINA FIRE AREA

impact. However, the front and eastern areas witnessed increased fire activity from a larger front. The fire then travelled toward the villages of Illabo, Bethungra and the Mt Ulandra Nature Reserve which also has a large communications infrastructure located at its summit.

Aircraft grounded

Due to the high winds associated with the front some supporting aircraft were unable to fly because of safety concerns, adding further complications to the fire. Aircraft were grounded for 30 to 45 minutes until the danger eased.

2100hr
The fire slowed its progress at around 2100hr as the winds abated and nightfall came on. At this stage the forward progress was halted some 38km from the origin. Patrol and attending to small outbreaks continued throughout the night.

During this period a fire occurred on the property 'Eringoarrah', about 15kms south of the main fire. This fire burnt 1200ha and required additional resources from the Riverina Zone to facilitate containment.

Highway and rail line closed

During the course of the day various sections of the Olympic Highway were closed due to smoke and traffic hazards, initially the section to the west of Junee and then between Junee and Bethungra. The southern rail line was also closed as protection for firefighters working in the area on Sunday evening.

A verbal report indicated that one person had been severely burnt and that a fire tanker had been involved in an accident. No other major injuries were reported.

Day 2, Monday 2 January 2006
Weather conditions abated considerably during day two which allowed for further patrol and extinguishment. Previously constructed containment lines were used to black out on all sides of the fire. Areas within the main perimeter which had not burnt were also patrolled and made safe.

The southern rail line was reopened at 0920hr with speed restrictions in place.

Heavy plant was used to construct new containment lines, with strategies developed to backburn that night. This backburn was to prevent the forward spread of the fire to protect threatened assets. Airbase operations were transferred from Forest Hill Airport to a site closer to the fire front on the property 'Englefield'. Aircraft were used for water bombing and surveillance.

From top to bottom: RFS crews worked with private firefighting units.

Aircraft worked with ground crews to contain the blaze.

Aerial photo of Junee shows where the fire has passed.

This property survived the fast running grass fire which destroyed 10 homes and affected a large number of farms in Junee on New Years Day.

A BACKBURN WAS SUCCESSFULLY COMPLETED DURING THE EVENING OF DAY 2

A backburn was successfully completed during the evening with crews maintaining patrols during the night.

RFS Fire Investigators started the investigation into cause and origin of the fire.

Day 3, Tuesday 3 January 2006
With the assistance of easterly winds, patrols continued on all flanks with no significant outbreaks. The Planning section of the IMT identified and mapped fall back lines should the need arise.

Containment lines were strengthened by ground crews and also by the application of fire retardant between the fire and inaccessible country on the eastern sector. Retardant was also used to provide extra property protection at the 'Eringoarrah' fire. Restoration work started.

Day 4, Wednesday 4 January 2006
Further patrols were made, with hot spots attended to. An aerial infrared line scan was conducted and this also identified hot spots, which were subseqentially attended to by ground crews.

RFS Commissioner Phil Koperberg, Acting Prime Minister Mark Vaile, Acting NSW Premier John Watkins and NSW Emergency Services Minister Tony Kelly inspected the fireground and visited the Ingram family of 'Crestwood Lavender Farm' who had lost their residence during the fire. A press conference followed at the Junee emergency headquarters.

Day 5, Thursday 5 January 2006
Strategies regarding the containment lines were effective with crews becoming more confident that the fire would not escape. Aerial surveillance continued using rotary wing aircraft, with fixed wing aircraft on standby.

Day 6, Friday 6 January 2006
The fire remained in containment lines with trees well inside the perimeter being extinguished. Patrols continued and were scaled back in the afternoon

The Section 44 for Junee Local Government Area was revoked at 1800hr.

A final aerial infrared line scan was undertaken on Monday 9 January and crews continued to mop up and black out hot spots until Tuesday 17 January 2006 when the fire was declared out.

Districts involved

Bland	Temora
Boorowa	Harden
Cootamundra	Young
Gundagai	Tumbarumba
Tumut	Albury
Greater Hume	Urana
Lockhart	Wagga Wagga
Junee	Coolamon
Lachlan	Parkes
Forbes	Weddin

Fire Facts
25,200 ha burnt
Approx. 200 properties affected
10 houses destroyed
4 shearing sheds destroyed
Approx. 20,000 sheep killed
Approx. 100 cattle killed
Approx. 1500 km fencing damaged
20ha unharvested crop burned

Resources
116 tankers
24 support vehicles
9 heavy plant
660 firefighters
5 helicopters
5 fixed wing aircraft

Dubbo firefighters are briefed as they arrive on the fireground.

OIL WELL ROAD FIRE DAMAGES PILLIGA STATE FOREST

Story compiled from Pilliga Fire Section 44 Report submitted by Incident Controller Donald Nicholson, Operations/Fire Manager Forests NSW Dubbo.
Photos by Insp. Sean Chipman, RFS New England Zone Community Safety Officer

Twenty three days after a lightning storm struck Narrabri Shire, smoke became noticeable in the Pilliga East State Forest.

The fire had burned quietly since 1 December 2005 until a Boggabri landholder reported smoke at 1420hr on 23 December.

Fire behaviour became more noticeable in the afternoon as surface air mixed with an upper level heat low, forming a convection column. Prolific grass cover following a wet spring and dry air over several days also contributed to rousing the fire.

Day 1 – Friday 23 December 2005
At 1610hr *Bomber 288* reported "multiple fire breakout of 10ha" in the locality of Nickel Rd and Oil Well Rd, Pilliga East State Forest. It became known as the Oil Well Road Fire.

Local crews started to arrive shortly after and at 1629hr Boggabri 1 was also attending a hayshed fire.

Heavy plant was immediately dispatched with Forests NSW grader and a D6 dozer deployed, along with firefighting crews from RFS, Forests NSW (FNSW) and National Parks and Wildlife Service (NPWS).

Fire runs four kms in 3 hours

At about 1700hr the fire developed a convection column and ran in a southeasterly direction, jumping Bohena Ck to the east and then to the south. The fire made a 4km run in three hours reaching 416ha.
FNSW firefighters, a grader and dozer remained on the fireground overnight, aiming to contain the fire and backburn edges before dawn.

TWENTY THREE DAYS AFTER A LIGHTNING STORM STRUCK NARRABRI SHIRE, FIRE BREAKS OUT IN THE PILLIGA STATE FOREST

Day 2 – Saturday 24 December 2005
The fire was contained at 0530hr with a perimeter of 10km and an area of 420ha. Heavy plant resources were increased to support mop up at first light. Two bombers were tasked to the fire to assist ground crews.

A predicted southwest change hit the fire at 1400hr and the fire broke 30 minutes later, jumping Self Camp Rd at 1451hr. By 1815hr conditions eased with winds down to 2kph. The fire had run 6km in four hours.

At 2000hr a Section 44 declaration was made for the Narrabri Rural Fire District. The north-eastern flank broke at 2226hr with fire running across Garlands Rd and new boundaries were set to the east of Cowallah Ck.

Day 3 – Sunday 25 December 2005
Crews rested from 0300hr to ensure availability on Christmas Day. At 0800hr the fire was 1673ha with a perimeter of 27.6km.

Crews contained several jump-overs during the early afternoon and the backburn along Garlands Rd was deepened as the fire met it. The fire jumped out of Cowallah Ck on the southeast flank at 1436hr and on the northeast flank at 1520hr with both fires running.

Large convection columns developed on both these runs. The runs spread 5km south until 1930hr when the wind changed, pushing them to the north for another 3km until conditions eased.

A large, 28km fireline had to be controlled by 28 field firefighters tasked with 20km of backburning before dawn the next day. Calm, evening conditions were predicted and backburning started at 2200hr on the south flank and at 2400hr along Garlands Rd, the northwest flank.

Day 4 – Monday 26 December 2005
By 0800hr the fire had burnt 4472ha with an expected containment size of about 6000ha. At 0950hr a bomber reported a fire in Pilliga West SF caused by lightning strike. Baradine forestry and RFS brigades from Coonabarabran and Coonamble controlled this fire to 27ha with support from heavy plant while aircraft water bombed the edge to slow its progress.

40 more firefighters arrive

Task Force support was arranged with 40 firefighters to arrive on Wednesday, 28 December, air operations were boosted to three bombers two helicopters and the Incident Management Team was also increased. Aerial incendiary work was planned for the evening.

Cold water and high energy bars were a welcome site for firefighters with a mobile cold room set up at the staging area.

Divisional Commander South reported completed containment lines and backburning work at 1700hr while the northern division's final backburn was 'going in' well. At 1746hr *Firebird 270* successfully dropped two lots of incendiaries into the unburnt area between the two fire runs of the previous day.

The big task for the night was for crews to consolidate the 57.5km of containment lines, 'pushing in' with heavy plant and blacking out.

Day 5 – Tuesday 27 December 2005
Containment lines held and a final aerial incendiary drop was done at 1022hr. Mopping up continued on the fire in Pilliga West SF. By 1200hr internal burning was complete with the final burnt area of 6082ha and fire perimeter of 57.5km reached.

DAY 5 – AND CONTAINMENT LINES HELD

Crews continued to consolidate the fireline in the north and south division with assistance by *Firebirds 230 and 270* water bucketing hot spots on the north and east flanks. Minor spot overs were contained and night crews continued this work.

Day 6 – Wednesday 28 January 2005
Containment lines continued to hold and the huge effort of deepening containment lines was paying off. The Liverpool Ranges/ Tamworth Task Forces arrived and relieved local crews. Consolidation work continued with Park Air 2 completing an infra red run to provide crews with a map of hot spots.

A CREW FROM DUNEDOO HELPED LOCALS MOPPING UP

At 1530hr a severe thunderstorm passed over the west and north of the fireground and the Narrabri district. At 1545hr two grass fires started in the Jacks Creek Rd area but were extinguished by rain before crews arrived. At 1756hr the Western Task Forces took over the night shift on the fireground.

Day 7 – Thursday 29 January 2005
The main fire was quiet and attention turned

to planning and securing fallback lines for the next bout of bad weather. Field crews and aircraft concentrated on deepening lines and rounding up small spot overs.

At 1648hr another fire was reported about 25km east northeast of Gwabegar known as the Sandy Rd Fire. Water bombers were tasked to the fire and slowed its spread before nightfall while ground crews were deployed. A FNSW grader was tasked to create a break around the 7ha fire.

RFS crews were stood down on the main Pilliga fire at 2400hr.

Day 8 – Friday 30 January 2005
The Sandy Rd Fire was contained and all was quiet on the main Pilliga fire. Heavy plant were tasked to complete eastern fallback lines at Yellow Springs Ck Trail and another on the southern flank across Cowallah Ck.

The Section 44 was revoked at 1800hr as consolidation was complete, the containment lines had held for five days and FNSW personnel would continue patrol over the New Year period and beyond.

Agencies Involved
NSW Rural Fire Service
Forests NSW
Department of Environment and Conservation (NPWS)
Narrabri Shire Council
NSW Fire Brigades
NSW Police
NSW Ambulance Service
Narrabri State Emergency Service
Narrabri Volunteer Rescue Association

Resources Utilised
110 firefighters
21 tankers
9 strikers
15 incident management team
2 water carts
5 dozers
3 graders
3 fixed wing aircraft
2 rotary wing aircraft

RFS Brigades

Losses
About 2000ha of productive Cypress/ western hardwood forest

Dunedoo Rural Fire Brigade crew assists local firefighters with mopping up the Oil Well Road Fire.

The fire also affected timbered country. Photo by John Clark

LIGHTNING LIGHTS UP WEDDIN MOUNTAIN NATIONAL PARK SECTION 44 2 - 16 JANUARY 2006

Below: Narromine crews overlook the fire at Weddin Mountain, 10km from Grenfell

Story compiled by Meeka Bailey, RFS Media Officer from the Section 44 report by Supt. Ken Neville, Incident Controller.

Up to 200 firefighters fought a 12 day battle in the Weddin Mountain National Park fire.

Lightning strikes started the blaze in the park located 10km southwest of Grenfell on Monday 2 January 2006.The park is surrounded by farming properties with dry, stubble paddocks following harvest and heavily timbered Bimbi State Forest.

Inaccessible country

Located in steep, inaccessible country, containment was difficult and weather conditions did not assist firefighters. Local landholders were advised to plough firebreaks in stubble paddocks to assist firefighters if further spotovers occurred.

During the Section 44 declaration firefighters also had to deal with 19 other fires, most started by lightning strikes.

The total area burnt by these fires was 6489ha.

Day 1, Monday 2 January 2006
Storms had passed through the area the previous evening, striking Weddin Mountain. Spotter aircraft had been deployed to the area and NPWS staff contacted neighbours advising of the strikes and asking for information on any smoke sightings. Fire was reported at 1403hr and NPWS immediately responded.

AIRCRAFT CONFIRMED THE DIFFICULTIES TO BE FACED

'Windemere' Base adjacent to the park reported the fire by radio at 1432hr as being several hundred metres into the bush off the Gap Trail.

Aircraft confirmed the fire was about a quarter of a hectare in size with flame height of 1m, the western side was going and there was no vehicle access.

Two fixed wing bombers were responded from Cowra Airport to attack the fire. As NPWS crews responded the fire put up light smoke but began to move on their approach. Crews walked in with hand tools and planned to construct a trail in front of the head of the fire.

The fire spreads

As bombers dropped their loads the fire was about 4ha with active flames. At 1600hr NPWS crews believed they could still hold the fire as it burned up a fairly flat ridge with small flame heights. A rakehoe line was started ahead of the fire, however, winds increased, causing the fire to roar in the gully below the crews. The decision was made to exit back to Gap Track Trail. More RFS and NPWS crews were ready to assist. Water bombers continued to work and an

airbase was being set up at Caragabal to shorten the distance between return flights. Graders were being tasked to the eastern side of the mountain to put in firebreaks. A dozer line was attempted in front of the fire; however, the area was too rough.

Section 44 declared

NSW Fire Brigades (NSWFB) task forces were being organised for property protection between the fire and Grenfell. A Section 44 declaration took effect from 1800hr and an RFS volunteer from Weddin was selected to provide local knowledge to the Incident Management Team (IMT).

At 2000hr a backburn was put in along Gap Trail Sector to ensure the fire did not escape into the southern end of Weddin Mountain. While the backburn went in well, there were some areas of unburnt fuel remaining along this sector.

Day 2, Tuesday 3 January 2006
The containment strategy included constructing a dozer trail along the ridge line to contain the fire to that area of the mountain. Aerial incendiaries would be dropped into unburnt areas along Gap Trail and the escarpment on the eastern side to allow the fire to travel down the mountain, rather than uphill which would increase the likelihood of spotovers. Ground crews would then backburn as the fire approached from the top.

FIVE FIXED WING BOMBERS AND ONE HELICOPTER ASSISTED GROUND CREWS

Crews and aircraft quickly contained a spotover in Goonaroo Sector during the afternoon and contained the fire to the mountain area. Terrain was slowing progress of the dozer line in Wentworth Sector and fall back options were used as the fire approached impact on this area.

Day 3, Wednesday 4 January 2006
Local Strike Teams were joined by RFS crews from Canobolas and Orana with RFS Region East teams expected that evening. Efforts concentrated on East Division in Gap Trail, Goonaroo and Barker Sectors with backburning and incendiary drops as required to tie off the lines with a hazard reduction burn conducted in April 2006.

Containment lines held. The eastern side of the fire posed the greater threat and it was planned to advance and strengthen containment lines in this area prior to advancing the fire edge too quickly in the western division.

Day 4, Thursday, 5 January 2006
Crews focused on deepening containment lines with consideration for tactical backburning in Eualdrie sector. Plans for the western division included backburning along prepared containment lines after incendiaries were dropped over cliff lines. Four stages were planned, starting in Nowlan's sector, then Seaton's to Small Basin and finally Eualdrie.

The fire is contained

By 1833hr *Park Air 2* reported the first three incendiary stages had dropped and all was looking good. At 1919hr the western divisional commander reported a spotover into Bimbi State Forest following unpredicted strong winds at Seaton's Farm, a historical NPWS site. Crews were deployed to Nowlan's Rd where a backburn was put in at 2045hr and was completed by 0023hr, successfully containing the spotover. Crews contained the fire under trying conditions.

Days 5 - 7, Friday 6 January to Sunday 8 January 2006
During this period the task for all sectors

was to patrol and black out the fire edge to at least 50m into burnt country with the exception of Small Basin and Eualdrie Sectors where tactical backburning and aerial incendiary work was conducted.

Day 8, Monday 9 January 2006
The northern boundary of the fire was finally joined, with all edges contained. Aircraft continued to use infrared scanning to identify hotspots for ground crews to extinguish. Extra containment lines had been constructed to the northeast and northwest of Weddin Mountain in case of further breakouts. A public meeting was held in Grenfell to inform the community of fire progress.

Days 9 - 12, Tuesday 10 January to Friday 13 January 2006
Patrolling and blacking out continued with operations to scale down over coming days and aerial scanning to continue. Numerous hotspots within 200m were identified with crews working on these during the days.

Day 10 - 11, Saturday 14 to Sunday 15 January 2006
Blacking out operations continued with the chance of fire escape decreasing daily. During Sunday afternoon widespread thunderstorms crossed the whole area. While a welcome 5mm to 25mm of rain fell at Weddin Mountain, the storms brought large amounts of lightning and at least another six fires in Lachlan and Weddin districts.

Day 12, Monday 16 January 2006
Patrolling the Weddin fire was being completed by NPWS units and local brigades. These continued until 6 February. The Section 44 declaration was revoked at 1800hr.

Fire Facts
Agencies Involved
RFS
National Parks & Wildlife Service
NSW Fire Brigades
Forests NSW
NSW Ambulance
NSW Police
Weddin Shire Council
Grenfell Hospital
Department of Community Services

Department of Land and Water
Forbes Shire Council
NSW Department of Agriculture
Country Energy
NSW State Emergency Service
Lachlan Shire Council
Local hospitality industry

Resources Utilised
50 tankers
10 aircraft
7 plant

Losses
6498ha of private property, National Park, State Forest
Part of NPWS historic site of Seaton's Farm
27km fences

From top: Dry stubble paddocks susceptible to spotovers were one of the concerns with the Weddin Mountain Fire.
Photo by John Clark

Part of the coordinated firefighting force, NPWS and RFS crews, gather together.
Photo by Jen Dainer

Thick dust and smoke turns the sky orange as the sun sets.

ONE DAY AT THE WEDDIN MOUNTAIN SECTION 44

By Cameron Wade,
RFS Operational Media Officer

It was about 1900hr on 5 January 2006 at the Mount Weddin fire. The air attack officer in *Firebird 280* reported a spotover into the forest area on Seaton's farm.

This patch of timbered area is on the western side of the mountain and is a flat area of forest that joins the Bimbi State Forest. The Bimbi State Forest is surrounded by farming land on the other three sides.

Firefighters had been working for days trying to backburn at the base of the mountain but progress was slow. This was due to the threat of spotting into the grass and stubble paddocks as well as forested areas that surrounded the entire mountain.

Then the wind picked up…

The wind had picked up and was blowing at about 30kph from the south east. This pushed the spot fire west into the Bimbi State Forest. An urgent call was put in by *Firebird 280* for water bombers to be dispatched immediately to try to catch the spot over.

Wind conditions at the airbase prevented the bombers from taking off. The airbase was due west of the mountain and the strip ran north south. The change in wind direction and the speed of wind combined with the obstacles around the airbase, preventing the bombers from taking off when loaded.

Meanwhile, the night shift Region East strike teams had just left Grenfell. A call from Forbes Firecom asked the Blue Mountains and Sutherland strike teams to respond immediately to Nowlands Rd on the western side of the mountain to assist local crews with property protection. The travelling distance meant the 10 heavy tankers would be at least half an hour away. The fire was growing.

THE SKY TURNED ORANGE WITH DUST AND SMOKE IN THE SETTING SUN

Fire threatens 'Wheatfield'

The property 'Wheatfield', northwest of the fire, was directly under threat from the approaching smoke and embers. An officer from headquarters who was also in the area was sent to check on the property. The property owners were packing the car with belongings. The husband and wife were concerned for their dogs and stock. The wife relocated under the advice of the RFS officer and the husband stayed with the property. A short time later a heavy tanker from Heathcote (part of the Sutherland strike team) arrived and the crew set up for property protection.

Some locals arrived shortly after and brought a grader in to the homestead paddock. The grader proceeded to widen existing firebreaks around the property. Meanwhile, word had spread of the breakout and locals began to arrive with tanker trailers to assist.

Locals defend the property

Most of the local crews prepared to defend property as they suspected it was too late to try to hold the fire. The sky turned orange with dust and smoke and the sun was setting. The wind was strong and constant; there was a sense of looming disaster.

The Group Officer with the Sutherland strike team (who was from the Cumberland Zone) scouted into the forest to ascertain the scale of the fire. He reported back to the Blue Mountains Group Officer that he thought there may be a chance to stop this on Nowlands Rd. The two officers agreed.

Three strike teams join forces

A Wingecarribee strike team also arrived. The three strike teams combined and lined up on Nowlands Rd in the direct path of the fire and prepared to fight it head on. Beside two tankers, local crews stood back ready to defend property if the plan did not work.

Many days of hard work finally secured containment.

The fire was crowning through parts of the forest and the wind was not easing. The visiting crews very carefully began to backburn under strict directions from the group officers. A Group Captain from Parkes was also in the area and with some local crews began a dozer line to the south of the forest.

Local crews were asked to patrol the paddocks to the north of a trail that was being used as the northern containment line. A Cat 7 and Cat 1, assisted by multiple tanker trailers and slip-ons, maintained watch in the dry grass and stubble.

Locals had never seen so many fire trucks in one place

The western containment line was Nowlands Rd with 15 heavy bushfire tankers prepared. Some locals had never seen that many fire trucks in one place before. A private semi trailer bulk water carrier arrived and set up in the paddock opposite 'Wheatfield'. This became the filling point for the strike team tankers as they ran out. Turn around time for an empty tanker was only 15 minutes.

The backburning was working and at about 2200hr the visiting crews stopped the fire's westerly progress on Nowlands Rd. A very large sigh of relief was heard. The local crews and strike teams began mopping up when news came through of a break out on the southern containment line. Once again the Sutherland Group Officer quickly rushed around to assess the situation.

The smoke plume captured by aircraft working on the Weddin Mountain Fire.

THE THREAT HAD EASED FOR 'WHEATFIELD'… THEN THE WIND TURNED DUE EAST

Fighting the fire head-on

A briefing was held on the fireground between all three Group Officers and the agreement was to once again fight the fire head on. This meant backburning another 4km of road including the southern dozer line the Parkes Group Captain had been working on. Local crews were tasked with mop up and patrol of the previous backburn and northwest corner.

The visiting strike teams formed up once again and started backburning to the south western edge and eventually around to the new southern containment line. Spot overs did occur quite frequently, but because there were so many tankers and they were working together the line held. At about 0200hr the outbreak was declared contained and no fire had entered the grass lands surrounding the forest.

This event will be seen on Channel 9, NBN, WIN when the new series "RFS" is released later this year. For the full story on the new TV series go to page 18.

Fire spread towards Umina during the evening before a wind shift forced it back towards the Kariong community…and the Emergency Operations Centre.
Photo by Garry Walker

GOSFORD'S NEW YEAR FIREWORKS

Gosford Section 44

By Garry Walker,
RFS Media Liaison Officer Gosford S44

Gosford has had its fair share of major fires over the years, and the 2005/06 season was no exception. But no-one predicted the ferocity of the New Years Day fire.

The Quarry Fire impacted on the townships of Phegans Bay, Horsefield Bay, and Woy Woy Bay destroying three houses, seven cars belonging to RFS volunteers and directly threatened hundreds of other properties.

600 homes threatened

The Alison Point Fire made a significant run towards the urban suburbs Umina Heights and Umina Beach and directly threatened over 600 homes.

No-one could deny that Gosford was well prepared for any emergency that could be thrown at it after having a number of large incidents the previous month, including the Alison Point Fire in early December, then Somersby Falls Road Section 44 Fire on Christmas Eve and the Quarry fire on New Years Eve. Crews from Gosford had also been called to assist Wyong on the Chittaway Fire on Christmas Day.

Day 1 – Sunday 1 January 2006
New Years Day started early with several crews being called out to a number small incidents before responding into the Wyong District to a fire just over the border.

Pre-emptive Section 44 declared

Because a pre-emptive Section 44 was declared due to the extreme conditions the district already had an Incident Management Team (IMT) identified. By midday IMT members where beginning to assemble at the Kariong Emergency Operations Centre (EOC).

Shortly after midday crews were responding to a smoke sighting in the Brisbane Water National Park near the Hawkesbury River when they sighted a new fire just off Woy Woy Rd between Kariong and Phegans Bay.

As additional crews where responded from across the area, Operations Officer Insp. Ian Bartholomew went to the fireground to gather intelligence on fire movement. He reported the fire had jumped Woy Woy Rd and was heading towards property.

Temperature hits record high

Out of area assistance was called from neighbouring districts as the temperatures continued to climb to what was later to be the highest recorded temperature on the Central Coast in over 70 years – 44 degrees.

Many didn't make it to the Woy Woy Rd Fire after a new fire that started at Mt White jumped the F3 freeway causing it to be shut for most of the afternoon and into the evening.

Fourth fire breaks out

If three major fires weren't enough, a fourth fire was reported in remote terrain in the Dharug National Park at the very western edge of the Gosford District. This had the potential to become a very large fire.

Throughout the day there were a number of extremely trying times for the volunteers. The crew from The Bays brigade were responding back towards their station, finding their cars were engulfed in flames. As the vehicles were past salvage the decision was made to let them burn so the crew could save the properties surrounding their station.

CREWS DREW WATER OUT OF THE TOWN'S SUPPLY FASTER THAN COUNCIL COULD PUMP IT IN

Easing temperatures in the early evening should have been a blessing but the southerly change that came with it swung the fire towards the north, causing it to make a run towards the suburb of Kariong and the EOC.

Additional out of area crews where called in, many being positioned to protect the EOC. Inside, plans where being finalised for extensive backburning operations that needed to be carried out.

Day 2 – Monday 2 January 2006
Light rain fell in the early hours of the next morning, significantly decreasing fire activity but also hampering control operations that needed to be carried out throughout the day ahead of higher temperatures predicted for later that week.

Day 3 – Tuesday 3 January 2006
The third day of the fire bought an increase in temperatures and activity. Backburning

operations continued to be carried out along the ridgeline above Koolewong and Tascott, yet again blanketing the Gosford business district in thick smoke.

The potential for the fire to continue to impact along the northern peninsula and Hawkesbury River areas encouraged the IMT to launch a Community Liaison Team to brief the individual areas on current fire activity as well as spreading the community safety message.

Community meetings

Over the next 10 days staff and volunteers held over 15 community meetings and spoke to over 1000 individual residents, including victims that had lost property during the current fire.

At the height of the fire operations over 170 front line appliances from the RFS, NSW Fire Brigades and National Parks and Wildlife Service, supported by 10 aircraft worked on the firefront. They were supported by IMT and other support personal from the RFS and every conceivable agency available.

Garry Walker is an RFS volunteer from the Gosford District who acted as a Media Liaison Officer during the New Years Day Fires.

FIRE FACTS

4500ha burnt
7 vehicles destroyed
3 houses destroyed
25-50km fence losses
18 houses & structures damaged

RESOURCES

775 personnel
176 tankers
10 aircraft

RFS DISTRICTS INVOLVED

Gosford
The Lakes Team
Warringah/Pittwater
Hornsby
Baulkham Hills
Cumberland Zone
Lower Hunter Zone
Hunter Team

AGENCIES

NSW Rural Fire Service
NSW Fire Brigade
National Parks & Wildlife Service
Police
Roads and Traffic Authority
State Rail
DoCS
Ambulance Service NSW
Royal Volunteer Coastal Patrol
SES

From top: Coal & Candle Rural Fire Brigade was one of many out of area crews assisting Gosford brigades during the Section 44. Photo by Kevin Kolhagen

Rocky the SkyCrane was one of 10 aircraft that assisted ground crews on the Gosford fire. Photo by Dan Meijer

Crews backburning to contain the fire. Photo by Kevin Kolhagen

SMOKE ON THE WATER

By Stuart Dawson,
Senior Deputy Captain Brooklyn RFB

When members of Brooklyn Rural Fire Brigade, Hornsby district, saw huge amounts of smoke across the Hawkesbury River to the north of the town the decision was made to man their station.

After a few hours of listening to heavy radio traffic on the Gosford district radio and a "red light run" along Brooklyn Rd for a smoke sighting, a crew was tasked to assist Bar Point RFB with property protection along Mooney Mooney Creek.

Water access only

Mooney Mooney Creek is a water access only area on the Hawkesbury River and falls within Gosford Rural Fire District. Reports were that the Mt White fire had run in an easterly direction and was impacting upon properties in the area.

Leaving a crew to man the Cat. 1 and Pumper, at about 1800hr Brooklyn Boat responded to Mooney Creek to find the area heavily smoke logged making navigation between oyster leases challenging!

Low tide hinders efforts

After meeting up with the Bar Point boat crew and determining that we weren't going to get close to the properties due to the low tide (why is it always low when you need water?) it looked like dry firefighting was the call of the day.

Beating the southerly buster!

For the first few hours crews were scratching lines around various sheds and outbuildings. Brooklyn was joined by Dangar Island RFB who were able to get their fire punt into a closer position and provide us with water.

HEAVY SMOKE MADE NAVIGATION BETWEEN THE OYSTER LEASES CHALLENGING!

Once water arrived it was then a case of tying in the area around the properties by backburning before the southerly hit.

We had just finished the last critical section when the southerly hit us with quite ferocious gusts

With the temperature dropping the lines held. We mopped up the remaining hot areas and prepared to depart - but a glance to the east of us showed a huge glow in the night sky and confirmed that even though we had worked hard, there were other brigades that were doing even tougher in the Kariong area.

From Top: Brooklyn RFB manned their station on the Hawkesbury river as smoke plumes affected neighbouring Gosford district.

Brooklyn Boat assisted Hawkesbury River communities affected by fire.

Dry firefighting was used by Brooklyn firefighters to protect Hawkesbury River properties.

FORTY HOUSES SAVED FROM GRASSFIRE

CUDGEGONG SECTION 44 12 – 21 FEBRUARY 2006

By Paul Dewick,
Cudgegong Community Safety Officer

On Saturday 12 February 2006 at about 1400hr Cudgegong Firecom received a call from NSW Fire Brigades Katoomba to a report of a grassfire at 'Rathdowney'.

'Rathdowney' is a rural residential estate comprising 18 allotments of 2ha each, located between Kandos and Rylstone.

The area is predominantly open grass lands in the very scenic Rylstone Valley.

The fire quickly took hold, running from private land, across Australian Rail and Track Corp. estate and back into private, open grazing land.

Four units dispatched

RFS units from Rylstone, Olinda, Clandulla and Bogee were dispatched. A call was received very early from the Captain of Rylstone Rural Fire Brigade (RFB) indicating the fire was rapidly growing and moving fast. More units would be required quickly.

In a very short space of time the fire had burnt some 900ha. A Section 44 was declared at 1700hrs. Of the 29 brigades in the district, 26 supplied at least one crew and vehicle to the fireground within the first 48 hours.

Eight aircraft deployed

Aircraft were deployed early on the first day. *Bomber 221* and *Firebird 258* saw action within the first few hours of the initial report of the fire. A further six aircraft were deployed that afternoon. Crews worked

fervently, moving from farm to farm in property protection mode, saving more than 40 houses in the first four hours.

OF THE 29 BRIGADES IN THE DISTRICT, 26 SUPPLIED CREW IN THE FIRST 48 HOURS

By the end of the first day the fire had burnt out 2900ha of grass land. On the second day the fire was only 6km from the Wollemi National Park.

On day five of the declaration a storm front moved through north of Mudgee dropping 80mm of rain in Gulgong in less than one hour. The lightning started another 24 confirmed fires which were brought quickly under control and the Gulgong Deadmans Creek Brigade were, at one stage, put on stand by to assist the SES with possible low level flooding. There was little or no reported rain on the Rathdowney fire.

The Department of Primary Industries advised the fire caused about $1.7 million in losses, primarily fencing, stock and fodder. No homes were destroyed by the fire.

Stock losses – with a twist

In an interesting turn of events, the reported type of stock losses was altered after the fire control centre received a query about why it had counted rabbits instead of koalas and kangaroos. Unfortunately, a shed of commercially farmed rabbits was lost during the initial fire run. The query came from a person who had misunderstood the reports, believing that we that we had counted feral rabbits as a stock loss.

The Section 44 declaration went for nine days. Crews from as far away as White Cliffs, Goodooga, Penrith, Chifley, Blue Mountains, Canobolas and Orana attended the incident.

By the end of the operation the fire burnt 3,545ha. The cause of the fire is under investigation.

From top: The fire affected grazing and timbered country.

Cudgegong crews discuss containment plans.

Eight aircraft were tasked on the first day.
Photos by Glenn Coddington ACS

The cliff top fire threatened Merimbula properties. Photo by Ross Holander

NEW YEARS AT MERIMBULA

Story by Supt. Andrew Stark, Manager RFS Far South Coast Team

At 1244hrs on New Years Day, the Bega Fire Control Centre received a call from a Fire Spotting Tower at Wolumla Peak reporting smoke at Short Point Merimbula.

Within minutes multiple triple 000 calls were received reporting a fire in the caravan park at Short Point.

Dangerous conditions

The temperature was 42 degrees Celsius, humidity 16 per cent and wind was blowing from the northwest at 20kph gusting to 45kph.

The duty office at Bega Fire Control immediately paged Merimbula and Pambula Rural Fire Brigades (RFB) and Group Captain Chris Smith.

Early emergency calls suggested the fire was in the caravan park rather than bush, and Supt Andrew Stark was responded.

The RFS Region South Major Incident Coordination Team (MICT) located at RFS State Operations due to the large amount of activity in NSW during that period was advised of the escalating situation.

THE FIRE WAS ALREADY BURNING TOWARD HOUSES IN MERIMBULA

Chris Smith passed a situation report en route to the incident when he observed the fire was already burning in bushland toward houses in the vicinity of Cliff St, Merimbula.

More crews join the fight

At this point, units from Wolumla, Bega Headquarters, Nethercote and Eden were responded and other members of the Bega Senior Management Team attended the Fire Control Centre.

On arrival, Pambula units were positioned in the caravan park and started direct attack on the northern flank to contain the fire in anticipation of a southerly change forecast for around 1800hr.

Other units including NSW Fire Brigades were tasked to Cliff St for property protection. The fire was continuing to burn south toward Long Point, along the cliff top.

Change on the way

Units were advised via State Operations that the forecast southerly change could arrive as early as 1430hr, and its progress was monitored via the Bureau of Meteorology.

A request for a dozer was made to establish a containment line beside property and contain the fire on to Long Point.

At about 1420hr the wind began to change very quickly from the northwest around to the south though the west. On the fire ground the wind was continuing to change and swung around to east southeast at 20kph gusting to over 45kph.

Ember attack

This turned the western flank into a 3 km front. Forty properties in Cliff St and adjoining streets were impacted by extreme fire behaviour and ember attack. Further RFS units from Tathra, Tanja, Candelo, Bemboka, Kiah, Forests NSW and NSWFB were responding or on scene.

Despite the extreme conditions, property damage was limited to minor damage caused by ember attack at two dwellings; both set back one street from the interface.

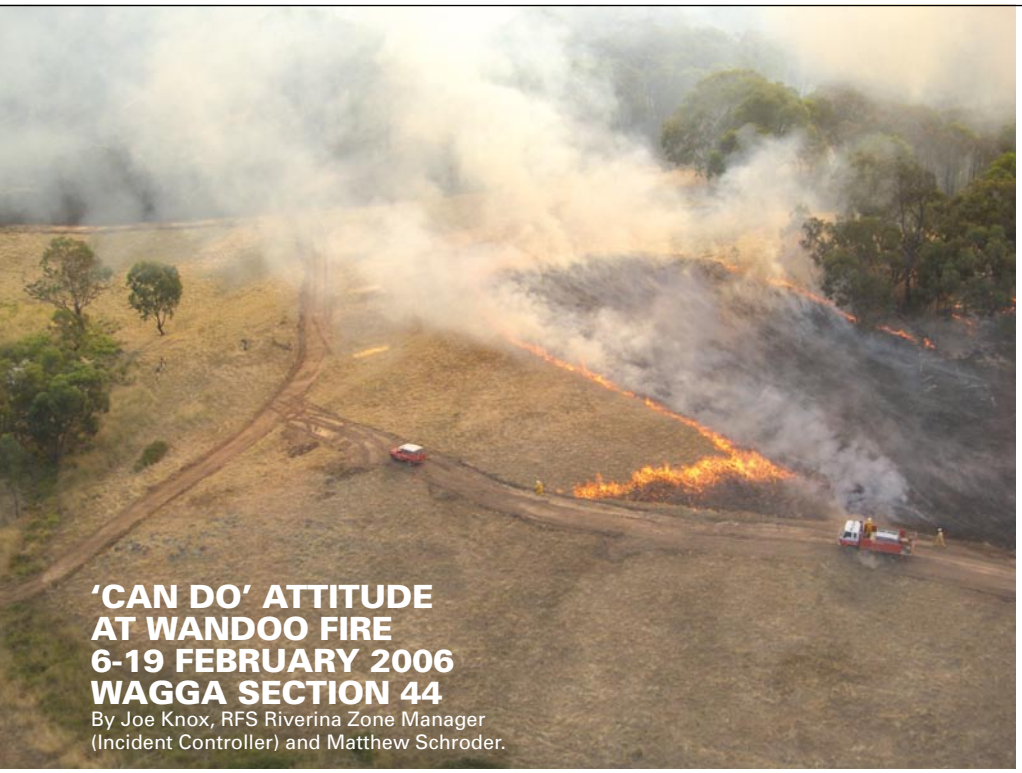
A containment line was prepared by a dozer from the end of Tasman St to the cliff edge and backburning was done to prevent further spread to the west.

Crews continued to contain the fire and units were stood down from 1730hr. The fire continued to burn behind containment lines for the next four days.

Top right: RFS members inspect the cliff top after the fire. Photo by Col Hazels

Bottom right: Properties were damaged during the Merimbula fire. Photo by Col Hazels

Crews work on containment lines of the Wandoo Fire on 7 February 2006. Photo by Grant Robinson



'CAN DO' ATTITUDE AT WANDOO FIRE 6-19 FEBRUARY 2006 WAGGA SECTION 44

By Joe Knox, RFS Riverina Zone Manager (Incident Controller) and Matthew Schroder.

First reports of the Wandoo fire were received by RFS Hume and Riverina FireCom between 1144hr and 1145hr on Monday 6 February. The origin of the fire was determined as being on the property 'Warmatta' on the Clifton Rd, 30km northeast of Holbrook.

Pagers, SMS and PMR radios were activated to alert brigades in the immediate area, including Billabong West, Billabong East, Pulletop, Mangoplah, Maxwell and Book Book.

Fire spreads rapidly

As the fire rapidly increased in size, requests for additional units were made to both FireComs from the fireground.

BY 1630 ON DAY 1, 350 PERSONNEL & 80 APPLAINCES HAD BEEN DEPLOYED

The conditions and rate of spread of the fire resulted in the deployment of 350 personnel and 80 appliances by 1630hr. RFS, Forests NSW, NSW Fire Brigades and National Parks and Wildlife Service crews tried to contain the fire as it burnt to the north of Holbrook, threatening the Hume Hwy and potentially the townships of Tarcutta and Humula.

Group Officer Alan Brown was a Divisional Commander for the fire and said the principal difficulty encountered by crews in the field was the terrain the fire was burning in.

"It was a mix of timbered and grazing land, in some places it was very steep. This made it difficult to put in decent containment lines.

"On the first day we had strong westerly winds. It was a fairly hot fire due to the very dry and very heavy fuel loads."

Out of area crews arrive

Out of area crews from Albury, Lavington, Tumbarumba, Walbundrie, Culcairn, Junee, Lockhart, Urana and Tumut were amongst those on the fireground at 1630hr.

THE HUME HWY WAS CLOSED FOR 29 HOURS

The fire jumped the Hume Hwy at 1730hr, resulting in its closure. The highway remained closed for 29 hours.

Various control lines were considered during the fire, the first being the Hume Hwy. The fire crowned as it approached the highway with the first reported spot fire at the property 'Toptarnie' 12km from the fire front.

The fire continued to spot into Mount Rattler and Mt Burngoogie and for the next few hours it jumped each containment line option in its path. The fire only impacted on the northwest corner of the Murraguldrie State Forest, this as a direct result of aggressive strategies employed by ground crews and water bombing aircraft.

Easing conditions begin to help

The fire slowed its progress around 2100hr as the winds abated slightly. Temperatures began to drop as nightfall came. At this stage forward progress was halted 28km from the point of origin. Attending to patrol and small outbreaks continued throughout the night.

Weather conditions the next day abated considerably which allowed crews to conduct further patrol, backburning and extinguishment. Previously constructed containment lines were used to black out on all sides of the fire. Areas within the main perimeter which had not burnt were also patrolled and made safe.

Heavy plant continued to be used to construct new and strengthen existing containment lines. Aircraft assisted in this activity as well as attending to small outbreaks

Additional crews were brought in from Region East. Four Strike Teams with both day and night shift crews arrived to assist in the patrol and mopping up of the fire.

Over the next few days the fire remained in containment lines with trees well inside the perimeter being extinguished. Patrols continued and were scaled back on Sunday afternoon.

The fire was officially declared out on 19 February. The fire had burnt out 9822ha, killing 1577 sheep and six cattle, destroying 10ha of pine plantation and an estimated 50km of fencing.

GENERAL NEWS

RFS TV SERIES

An inspiring, adrenaline-charged TV show, inside the world of volunteer firefighters battling some of the world's deadliest blazes to save homes and lives.

This is how Channel 9 is billing an upcoming series on the RFS.

Channel 9 recently commissioned the television production company Essential Viewing to produce an eight part series (8 x 30 minutes) about the activities of the RFS and the residents and property owners the RFS assists. The style of the series will be similar to 'Border Security' and 'RPA'.

Essential Viewing has been in development with the RFS on this series since late December 2005. To date material has been gathered from fire incidents at Gosford, Weddin Mountain, Wagga and Rylstone as well as coverage of activities at various Fire Control Centres, RFS Headquarters and aerial operations.

If sufficient material was shot during the fire season, the series could air as early as August this year. It is hoped that it will be played during prime time and if well received by the audience could become an ongoing series.

Marcus Gillezeau is the series director and works with other director/camera shooters during a fire incident. All his team have gone through media accreditation at RFS Headquarters and have personal protective equipment.

For a sneak preview of the show, RFS members can visit the MyRFS website www.myrfs.nsw.gov.au and follow the links to RFS New TV Series.

MORE HELP WITH HAZARD REDUCTION

Hazard reduction became easier in NSW from 1 February with the introduction of the revised Bush Fire Environmental Assessment Code by the RFS.

The Code is used by RFS staff to carry out free environmental assessments for essential hazard reduction works. It was originally introduced in July 2003 following concerns that environmental legislation hampered hazard reduction.

The Code provides a one-stop-shop approval process for most hazard reduction, making it easier. Instead of having to organise environmental approval themselves, the people of NSW can ask the RFS for assistance.

A review of the original Code was undertaken in 2005 and changes to the Code have greatly expanded the capacity to implement hazard reduction works, particularly in rural areas.

The new Code covers areas such as forests, farms and reserves so that large scale, mosaic burning can be approved. Also, schools, hospitals, nursing homes, plantations and boundary fences are all covered by the Code.

The distances for Asset Protection Zones (APZ) around major buildings such as communication towers, farm sheds, industrial and commercial buildings have increased from 10m to 20m. There are improved measures for the assessment of river side vegetation, soil erosion and threatened species.

"RFS volunteers are among the community members who said they wanted the Code to be used over a larger area and cover more assets so hazard reduction was made easier for more people," Executive Director of RFS Community Safety, Assistant Commissioner Rob Rogers said.

"THE NEW CODE IS PARTICULARLY GOOD FOR RURAL AREAS"

"The input of volunteers was essential in making the changes to the Code. The new Code is particularly good for rural areas because it makes it easier to handle environmental assessments for large scale hazard reduction burns and goes further in recognising fences and sheds as assets."

To gain environmental approval, a landholder can apply for a Bush Fire Hazard Reduction Certificate, which is determined by the RFS using the Code.

A BUSH FIRE HAZARD REDUCTION CERTIFICATE IS FREE

A Bush Fire Hazard Reduction Certificate is free and can take as few as seven days to organise.

Bush Fire Hazard Reduction Certificates are not required for agricultural activities such as stubble burning, burning sugar cane, burning diseased crops, orchard pruning and grazing.

A Certificate cannot be used in cases where an area is particularly environmentally sensitive, such as a rainforest or wetland. A more detailed environmental assessment may then be required. Your local RFS can provide advice on where to get another environmental approval if this is the case.

The new Code does not bring new regulations, it streamlines current regulations. Therefore, it helps people undertake hazard reduction within environmental regulations, and makes it easier to organise.

Hazard reduction in Duffy's Forest. Photo by Jill Watt

THE CODE PROVIDES A ONE-STOP-SHOP APPROVAL PROCESS FOR MOST HAZARD REDUCTION

Blue Mountains

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T-Shirt - Double stitched 100% Cotton & Australian made	S-XXL 3XL-6XL	(N)avy/(W)hite 6XL (N)avy only	$18.00 $20.00				
Polar Fleecy Jumper - Half zip front with 2 slant pockets at bottom	XS-3XL	(N)avy only	$42.50				
Polar Fleecy Jacket - Full zip front, Elasticated cuff, Draw cord waist	S-XXL	(N)avy only	$52.50				
Sloppy Joe - Super fleecy / Low pill with round neck & Australian made	S-XXL 3XL-6XL	(N)avy only (N)avy only	$29.00 $31.00				
Dress Jumper - 80/20 Wool/Polyester blend, Shoulder & Elbow Patches, Epaulettes, Pencil pockets & Australian made	S-XXL 3XL-5XL	(N)avy only (N)avy only	$85.00 $87.00				
Beanie - Acrylic - One size fits all - Embroidered RFS Logo	OSFA	(N)avy only	$11.00				
Beanie - Fleecy - One size fits all - Embroidered RFS Logo	OSFA	(N)avy only	$13.50				
Cap - Baseball - Brushed cotton, Adjustable velcro, One size fits all, Embroidered RFS Logo 1-24 $8.50 / 25-99 $8.00 / 100+ $7.50	OSFA	(N)avy only					
Medium Kit Bag - Heavy duty nylon & zips, Base board, 3 external zipped pockets with shoulder & hand carry straps	L 50cm x H 30cm x W 20cm		$35.00				
Large Kit Bag - Heavy duty nylon & zips, Base board, 5 external zipped pockets including "Wet" & Boot pockets with shoulder & hand carry straps	L 73cm x H 33cm x W 31cm		$45.00				

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*Red on Gold badges are Proban backed

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WEATHER & BUSHFIRE BEHAVIOUR

NSW has a history of droughts and severe fire weather which has caused some devastating fires, causing extensive loss of life and property and such tragedies are high on the list of "Natural Disasters":

As such it is important for each level of our Service to understand the weather, where they can access the information and the potential for its adverse influence on bush fire behaviour either immediately or within a few days.

Firefighters - should be aware of the strategies and tactics to be implemented, their surroundings, fuel levels, fire behaviour, current and forecast weather and not just rely on their crew leader's knowledge and competencies, so that they work as an integrated team supporting each other.

Crew Leader (CL) - (Officer in Charge (OIC) of a tanker) – should obtain weather information from their Fire Control Centre or the Bureau of Meteorology (BOM) website. On a duty day or when responded to an incident, you should know the Keetch Byram Drought Index (KBDI) (scale of 1 – 200), number of days since rain and the amount of rain that fell in the last 24 hours, the drought factor (scale of 1 – 10), relative humidity, temperature, wind speed, wind gust and direction and any forecast change.

It is essential to be aware of a change in wind strength or direction either by being provided with the forecast or by observing the "tell-tale" signs – a flank can quickly become a front and could seriously affect the safety of your crew. Apart from a front, a wind may also be associated with a storm downdraught, a dry downburst (microburst or macroburst), willy-willy or the arrival of a sea breeze. Firefighters can deduce the likely change of wind direction from a downburst by the location and direction of travel of the stormcell. Any such change if not forecast must be communicated immediately to FireCom and all crews on the fireground.

It is important to take weather readings on the fireground, which should be relayed to FireCom. This weather information will enable you to utilise the forest or grassland fire danger meter and assist in predicting the fire behaviour.

The BOM require your accurate fireground observations to provide a special fire weather forecast.

You should be aware of current and predicted weather - see the BOM website for:
- Weather Forecasts, Warnings and Observations
- Weather Charts
- Radar Images
- Satellite Images
- National Weather Charts including Mean Sea Level (MSL) Analysis and Prognosis
- Rainfall and Temperature Maps
- Seasonal Outlooks

Sector Commander (SC), Divisional Commander (DC), (Group Captain) is expected to have a superior understanding of weather prediction and the effects on fire behaviour. Interpretation of information in an Incident Action Plan, analysis of weather maps and an understanding of the Haines Index map will be of great assistance.

Incident Controller (IC) - is responsible for obtaining and analysing all relevant weather information, current and forecast, to establish and implement strategies to ensure the safety of all involved. The weather information forms an integral part of the Incident Action Plan (IAP), which details the efficient and effective use of all resources to effectively contain the fire in the shortest possible time, minimising life, property and environmental loss.

Fire Control Staff have access to the "Registered User" section of the BOM website, which provides additional information including:
- **Special Fire Weather Forecast Request Form**
- Latest Weather Chart and Satellite Picture
- Current NSW Observations
- **Weather Radar** and Thunderstorms
- Recent Conditions including Rainfall and Temperature Maps
- Drought and Stability Indices including **Keetch Byram Drought Index Map, Drought Factor Map** and **Haines Index Map**
- Weather Bulletins including weather and rainfall data
- **Forecast Charts** including MSL Analysis and Prognosis
- Forecasts and Warnings including **NSW Fire Danger Ratings**, **Four Day Rainfall** and **Four Day Fire Weather**, **Smoke Dispersion Forecasting Model** (NSW Trial) for hazard reductions and fires (State Operations controls for all agencies)
- Long Term Conditions and Outlook

State Operations During the Bush Fire Danger Period, State Operations facilitates a weather briefing for the next four days during a phone conference at 14.00 hours each Thursday for all agencies' regional fire managers around the State.

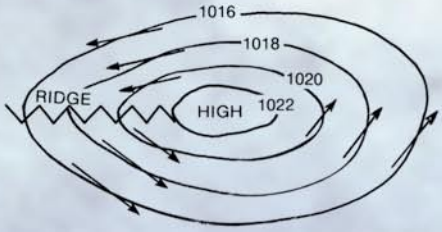
Total fire bans (Tobans) are based on the ratings (derived from forecasts of weather elements – temperature, relative humidity and wind speed - as well as the Drought Factors and Grassland Curing at specified locations in each NSW Fire Area) received daily from the Bureau of Meteorology, during the bush fire danger period, at approximately 16.30 hours. After consultation by the State Duty Operations Officer with the relevant Regional Duty Operations Officer/s, who is aware of the situation in each District/Team/Zone within their Region, a recommendation is made to the Commissioner who then makes the decision regarding the NSW Fire Areas to be declared.

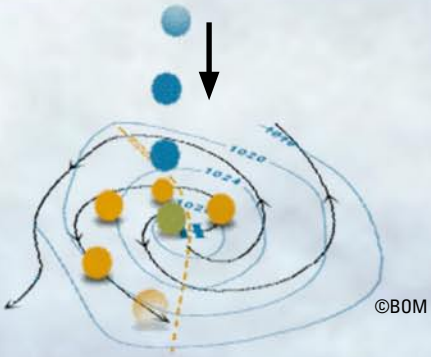
WEATHER AND BUSHFIRE BE

HIGH PRESSURE SYSTEM

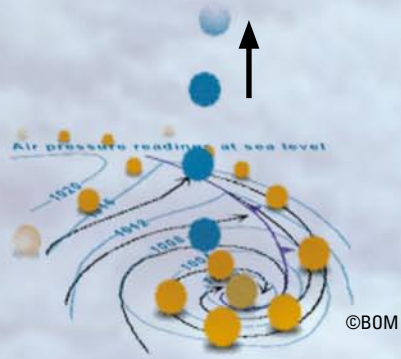
High pressure systems provide dry, warm weather with the possibilty of a lead up to critical fire weather. Winds circulate anti-clockwise

Isobars showing a ridge or wedge of high pressure





(High) Sinking air near the surface spreads out.

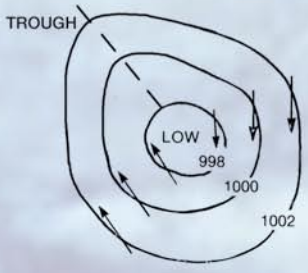


(Low) Converging air near the surface rises.

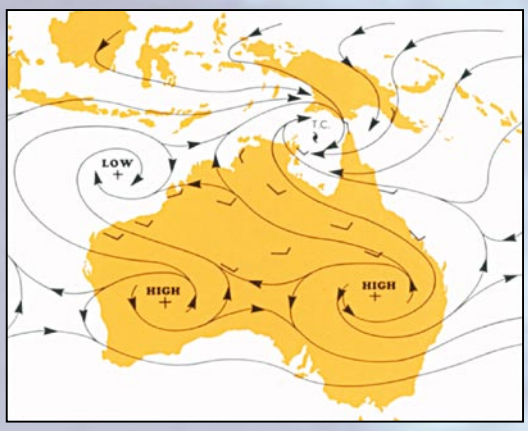
LOW PRESSURE SYSTEM

Winds circulate clockwise

Isobars and winds of a typical low



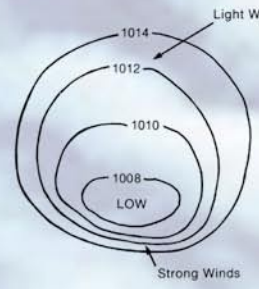
WIND PATTERNS



Streamlines show the direction of wind flows around highs and lows.

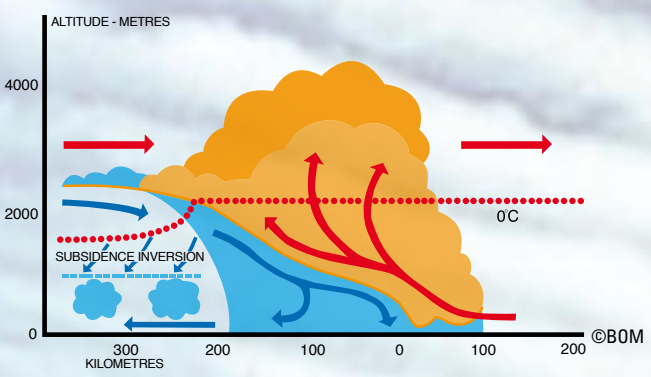
WIND STRENGTH

Wind strength according to pressure gradient



FRONTAL SYSTEMS

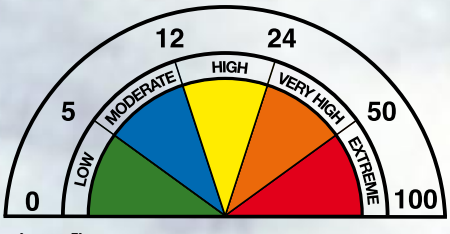
When one air mass moves into an area occupied by another, the two do not mix substantially unless their temperature and moisture are similar. A boundary zone known as a front forms between the two.



Diagramatic cross section of a typical cold front

EHAVIOUR www.bom.gov.au

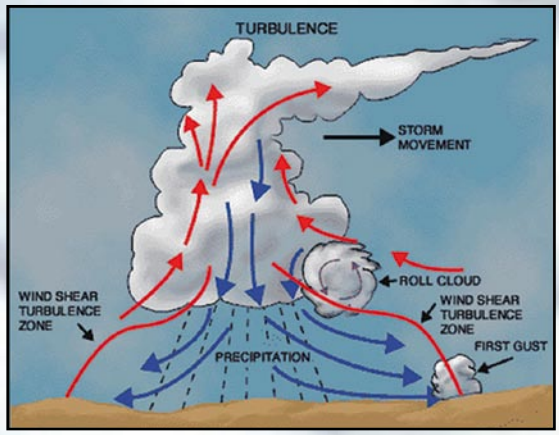
FIRE DANGER INDEX AND RATING



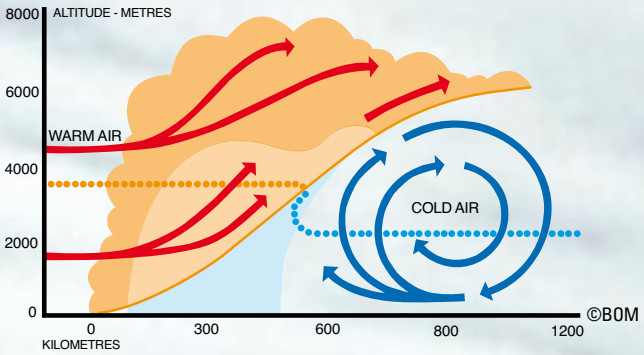
Intensity (kw/m)	Flame Height (m)	FDR	Forest Fires
0 – 50	0 – 0.5	LOW COOL CALM	Fires generally self extinguishing
50 – 500	0.5 – 1.5	MODERATE COOL LITTLE WIND	Hand tool lines should hold the fire. Direct attack recommended
500 – 2000	1.5 – 3.0	HIGH WARM SOME WIND	Fire too intense for direct attack. Parallel attack recommended
2000 – 4000	3.0 – 10.0	VERY HIGH HOT WINDY	Crown fire at upper intensities. Indirect attack recommended
over 4000	over 10.0	EXTREME VERY HOT VERY WINDY	Crowning, spotting and major fire runs likely. Control efforts probably ineffective. Defensive strategy recommended

Fuel loads heavier than 12.5 tonnes per hectare may produce more extreme fire behaviour

DOWNBURT (MICROBURST OR MACROBURST)

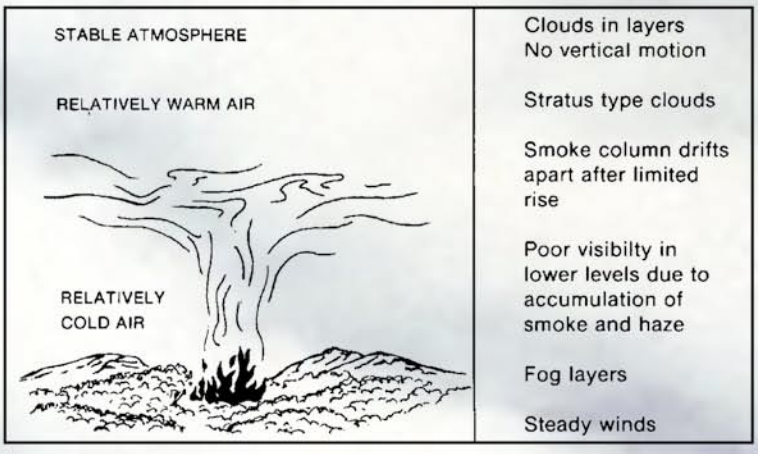


Cool dense air that sinks rapidly out of a downburst spreads out rapidly in all directions typically 80kph but can be up to 270kph causing a dangerous situation for firefighters.

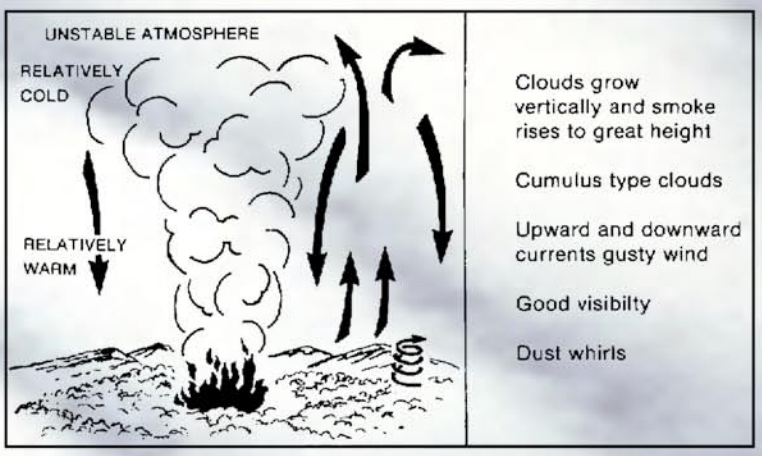


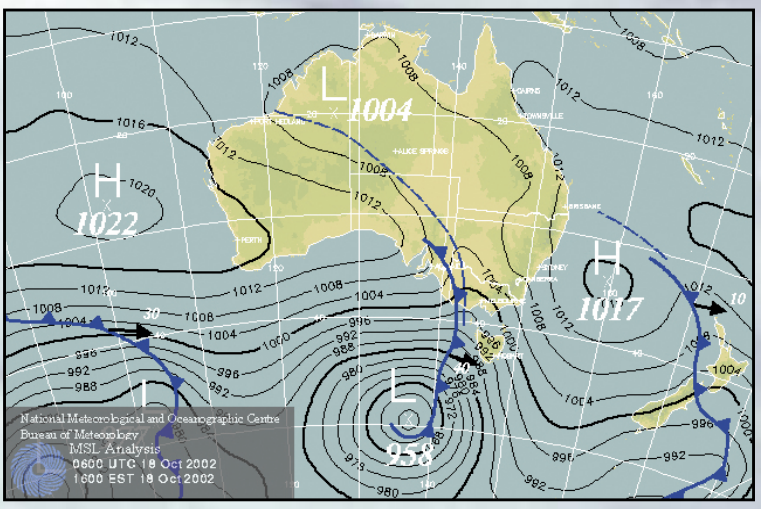
Diagramatic cross section of a typical warm front

STABLE ATMOSPHERE



UNSTABLE ATMOSPHERE





©BOM

Summer Heatwave - hot NW winds from inland Australia

Beaufort Scale - is a scale that uses observations of the effects of wind to estimate its speed. Refer to the October 2005 Firefighters' Pocket Book P51

Cold Front - In some areas along the polar front, cold, dense air advances towards the equator, causing the warmer, less dense air to be forced upwards over its sloping surface with the consequent reduction in temperature. This portion of the polar front is known as a cold front. Cold polar air is replacing warm tropical air. This action is usually rather violent and the sudden uplifting causes large cumulus clouds to develop (provided sufficient moisture is present) with shower type weather, and sometimes thunderstorms, at and near the front. If the air is very dry, a cold front can also bring a "dry change" with a change in wind direction and drop in temperature but with little or no cloud. Cold fronts are much shallower (less vertical height) in summer and move quickly up the coast and over western inland, but take much longer to pass through the ranges, where it is often a race between the easterly and westerly winds. The coastal and inland arms of the front meet somewhere on the ranges creating an "occlusion"

Convection - is the process generally associated with warm, rising air and the formation of cloud. Local breezes, showers and thunderstorms are a result of convection in the atmosphere.

Downburst (Microburst or Macroburst) - is a strong downdraught generated by a falling shaft of rain, associated with an isolated storm or shower, which rarely lasts more than 10 – 15 minutes. Dry microbursts can occur when the rain evaporates before it reaches the ground, where the intense cooling caused by the evaporation causes the descending air to become denser and sink even faster. When the downdraught hits the ground the wind spreads out rapidly in all directions, 80kph is typical but can be up to 270kph. Macrobursts are the same as microbursts but come from larger storm clouds.

Drought Factor - is a scale of 1 – 10, used when calculating the forest fire danger with the McArthur fire danger meter. It is based on the Keetch Byram Drought Index, the number of days since rain and the rainfall amount at the time of last rain.

El Niño - Nowadays, the term El Niño refers to the extensive warming of the Central and Eastern Pacific Ocean that leads to a major shift in weather patterns across the Pacific. In Australia (particularly Eastern Australia), El Niño events are associated with an increased probability of drier conditions.

Front - is the boundary between air masses having different characteristics.

Gust - is any sudden increase of wind of short duration, usually a few seconds.

Haines Index - is a measure of lower atmospheric stability and moisture. It ranges from 2 to 6, the higher the value, the drier and more unstable the lower atmosphere.

Highs - in the Southern Hemisphere are atmospheric circulations that rotate anti-clockwise with sinking air spreading out in a spiral away from centre. Anti-cyclones are areas of higher pressure and are generally associated with lighter winds and fine and settled conditions.

Isobars - are lines on weather maps joining places, which have the same mean sea level air pressure. Mean sea level pressure is an "equivalent pressure at sea level" that allows stations at different heights to be compared by taking their heights into account.

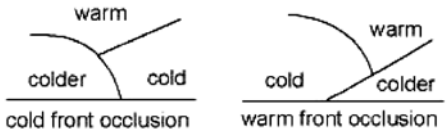
Keetch Byram Drought Index (KBDI) - provides an estimate of soil dryness (moisture deficiency). The number indicates the amount of rainfall in mm that would be required to reduce the index to zero or saturation. It is very useful for planning fire and hazard reduction operations. The KBDI is calculated daily by the BOM at around 180 sites across NSW using rainfall to 9am and yesterday's maximum temperature. The meanings of the various KBDI ranges are as follows:

- 0 – 24mm Mild
- 25 – 62mm Average
- 63 – 100mm Serious
- 101 – 200mm Extreme

La Nina - The extensive cooling of the Central and Eastern Pacific Ocean. In Australia (particularly Eastern Australia), La Niña events are associated with increased probability of wetter conditions.

Lows - in the southern hemisphere are atmospheric circulations that rotate clockwise with converging air rising in the centre. Cyclones are areas of lower pressure and generally associated with stronger winds, unsettled conditions, cloudiness and rainfall.

Occluded Front - When the cold front moves faster than the warm front and as it overtakes the warm front, the warm sector is closed and a combined front forms. This process is called occlusion. The front formed in this way is called an occluded front.



Relative Humidity - is a traditional indicator of the air's moisture content. It is the ratio of the amount of moisture actually in the air to the maximum amount of moisture, which the air could hold at the same temperature. Relative humidity is normally expressed as a percentage and at saturation the relative humidity will be very close to 100%. The air can hold more moisture at higher temperatures, hence the relative humidity alone does not give an absolute measure of moisture content.

Ridge - A ridge is an elongated area of relatively higher pressure. It is indicated by rounded isobars extending outwards from an anti-cyclone (high) and has a ridge line associated with it. The ridge axis is occasionally shown as a wavy line on the weather chart, but is often not indicated at all.

Southern Oscillation Index (SOI) - is calculated from the monthly or seasonal fluctuations in the air pressure difference between Tahiti and Darwin.

Squall - comprises a rather sudden increase of the mean wind speed which lasts for at least several minutes before the mean wind returns to near its previous value. A squall may include many gusts.

Thunderstorms - Deep convective clouds or clusters of clouds from which lightning (electrical discharges resulting in flashes of light) and the resulting thunder occur. This is usually associated with precipitation (rain or sometimes hail). A thunderstorm may have lightning to peripheral areas where no rain falls or it may be a completely dry storm creating lightning strikes to ground, which have the potential to start fires.

Tropical Cyclones - are intense low pressure systems which form over warm ocean waters at low latitudes. Tropical cyclones are associated with strong winds, torrential rain and storm surges (in coastal areas). Tropical cyclones can cause extensive damage as a result of the strong wind, flooding (caused by either heavy rainfall or ocean storm surges) and landslides in mountainous areas as a result of heavy rainfall and saturated soil. If they attain maximum mean winds above 117 kph (63 knots) they are called severe tropical cyclones. In the North Western Pacific severe tropical cyclones are known as typhoons and in the North East Pacific and Atlantic/Caribbean they are called hurricanes.

Troughs - A trough is an elongated area of relatively lower pressure. It is indicated by rounded isobars extending outwards from an area of low pressure and has a trough line associated with it. The trough axis is usually shown as a dotted line on the weather chart.

Warm Front - In some areas along the front, warm air of lower density moves towards the pole, climbing up over the sloping surface of the colder and denser air mass. This portion is called a warm front. Warm tropical air replaces cold polar air. When sufficient moisture and lifting are available, the cloud sheet is usually more extensive than that produced by a cold front and rain usually falls ahead of the surface front.

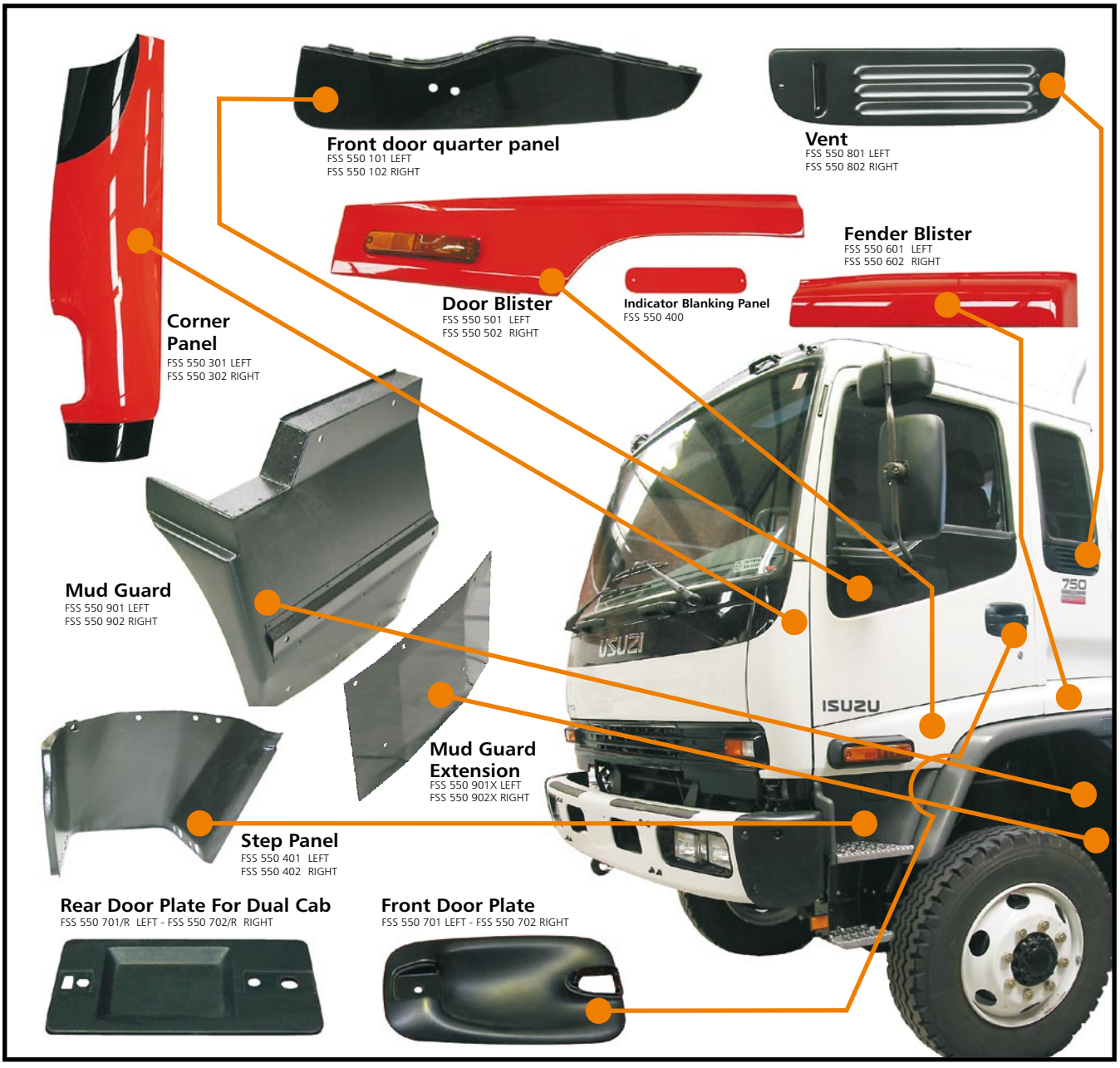
Wind is movement of air and is experienced as a continuous succession of gusts and lulls (quiet intervals) associated with equally rapid changes of direction over a range, which may exceed 30°. The mean wind speed over a period of time is therefore the mean of many gusts and lulls. Usually only the mean wind is forecast, unless the gusts are expected to be a significant feature. For instance, Fresh, gusty south-west winds indicates that the mean wind speed will be between 17 and 21 knots (refer to Beaufort Scale in the October 2005 Firefighters' Pocket Book P51) and the mean wind direction will be from the south-west, but that there will also be gusts to speeds significantly higher than the mean.

Thanks to Andrew Haigh, Bureau of Meteorology for his assistance.

Alan Brinkworth, Chief Superintendent
Manager Operations, Policy and Standards

Aluminium Replacement Safety Panels

For Isuzu, Hino and Mitsubishi Canter trucks



Why install aluminium replacement safety panels ?

In extreme conditions such as attending bushfires, plastic panels are simply not adequate. Newlans Coachbuilders have addressed this problem by designing and manufacturing aluminium replacement panels that will not rust or warp and can often be repaired after accident damage unlike plastic panels making them a one time investment and a long term budget saver.

Newlans panels are easy to install and available pre-painted in fleet colours. Already widely used around Australia by most rural fire service orginisations. Newlans aluminium replacement safety panels are a potentially life saving appliance upgrade.

Tel: (08) 9444 1777

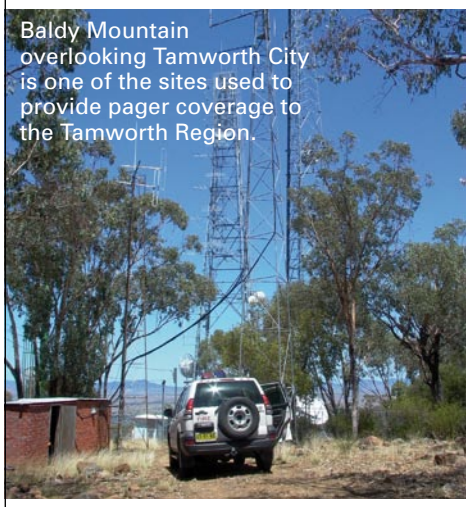
Fax: (08) 9444 1866
newlans@bigpond.net.au
47 Gordon Road (East)
Osborne Park 6017
Western Australia

newlans coachbuilders

www.newlanscoachbuilders.com.au

The interior of the radio transmitter building on Mount Baldwin, near Manilla, where the RFS will be installing one of the other sites.

PAGER NETWORK EXTENDS TO TAMWORTH



Baldy Mountain overlooking Tamworth City is one of the sites used to provide pager coverage to the Tamworth Region.

The expansion of the RFS Emergency Pager Network to the Tamworth Regional Council area is set to improve response times for emergency services in the region.

The Tamworth network will be the latest addition to the RFS system, which is now the largest provider of paging services in NSW, with a coverage area exceeding four times that of any commercially provided network.

Specifically intended for time critical message delivery, the RFS paging system is also used by other volunteer emergency service organisations as diverse as Mines Rescue and Volunteer Coastal Patrol in other areas of the State.

The Tamworth network will comprise eight strategically placed high power radio transmitters, all under the control of a centrally located page messaging and data handling computer.

The network has been designed and implemented by RFS Operational Communications in consultation with RFS Tamworth staff and volunteers, the State Emergency Service (SES) and Council.

Network infrastructure will be installed at a cost of $ 105,000.00, funded by a joint venture between the RFS and the SES.

IN FEBRUARY, TAMWORTH COUNCIL AGREED TO GRANT $18,480 FOR THE PURCHASE OF PAGERS

When complete, the network will enable RFS brigades and SES units to respond to emergencies within seconds of the initiation of a call-out

Previously, each brigade member had to be contacted individually, usually by phone, requiring dozens of calls to be made for major incidents.

When the system is established, firefighters and emergency service personnel will be contacted with one single call, resulting in reduced response times.

"Network coverage will extend to Manilla, Nundle, Werris Creek, Barraba and as far east as Uralla," said Alan Stone, RFS Operational Communications Officer.

"An additional radio transmitter at the summit of Mount Kaputar will extend the coverage and data input to the system to Narrabri, where a back-up message entry point is being established."

The system has been welcomed by brigade members, in particular, the Tamworth Communications Brigade.

"Mobile phone contact for many remote areas is quite poor so contact can be hard in some circumstances," said Deputy Captain with Tamworth Communications Brigade, Maria Curtis. "With the pager system we have a more reliable ability to contact members."

THE CHANGE WILL ASSIST RURAL MEMBERS THE MOST

RFS Tamworth Zone Manager, Supt. Lyndon Wieland, said the change will assist rural members the most.

He said, "Most are farmers and don't carry mobiles with them out into the paddocks."

Tamworth Group Captain Alan Brown said the people of Tamworth Region would benefit.

"It will mean better call outs and it will be better for the community," Mr Brown said.

Supt. Wieland hopes to provide all 35 brigades with four or five pagers each.

SES and medical response trial

As part of the partnership with SES, Nundle will become one of the first trial areas for SES Community First Response Teams which will use the RFS Pager Network.

This is a specialist medical team of SES volunteers, trained to respond to medical emergencies in rural areas and provide primary care until the arrival of Ambulance resources.

The need for this service has been established by SES in consultation with the NSW Ambulance Service. SES Flood and Road Rescue Teams will also use the RFS Pager Network.

AUSTRALASIAN EDUCATION AND FIRE AWARENESS CONFERENCE

The RFS 10th Annual Community Education Conference & Expo has been renamed the Australasian Education & Fire Awareness Conference (EFA) and will be held in Newcastle from 18 - 21 May 2006.

The new name comes as a result of increasing interest and participation of other fire agencies from across Australasia.

PRESENTATIONS FROM SISTER SERVICES

Some of the presentations this year are from sister services including Western Australia, Queensland and New Zealand.

The program for RFS volunteers includes the following sessions:

- Community meetings, Country Fire Authority Victoria
- Smoke alarms and disadvantaged communities, New Zealand Fire & Rescue Service
- Bushfire prepared communities, Queensland Fire & Rescue
- Managing partnerships, National Parks & Wildlife Service
- Bushfire planning in rural and coastal communities, SA Country Fire Service
- How houses burn, CSIRO
- Cadet Training Programs, NSW Rural Fire Service
- Aboriginal communities, Fire & Emergency Services Authority WA
- Bushfire impact analysis survey, NSW Rural Fire Service
- Solving child and youth fire setting, Queensland Fire & Rescue

Friday evening will feature a Welcome Reception and Official Conference Opening Dinner hosted by the RFS Commissioner Phil Koperberg AO, AFSM, BEM. Also in attendance will be the Minister for Emergency Services Tony Kelly and the Mayor of Newcastle.

The Saturday evening will feature the Conference Dinner for all delegates.

The Community Education Conference is one of the largest and most attended events on the RFS calendar and offers a tremendous opportunity for all delegates to gather information on the Service's vital role of Community Education.

Registration for the conference has closed. For further information contact Paul McGrath on (02) 8741 5418 or paul.mcgrath@rfs.nsw.gov.au.

Station openings are one of the important events the new resource kit will help brigades to organise. Commissioner Phil Koperberg addresses brigade and community members at the official opening of Barry Hobby's station, Blayney Shire.

BRIGADE EVENTS NOW ASSISTED BY RESOURCE KIT

Events at the RFS are an integral part of the Service and local community life. The tireless work of our 70,964 volunteers is represented at local events such as station openings, tanker handovers, the awarding of medals and brigade anniversaries.

The RFS Media and Public Affairs team have developed an Events Management Resource Kit to help brigades and districts to host events, and standardise our approach.

These events present an opportunity to promote who we are and what we do. By providing professional, consistent events we can support volunteers and make these events memorable.

Local knowledge and event management skills

The local knowledge and event management skills of brigades are greatly valued and the kit has not been designed in any way to remove autonomy from brigades for the organisation of events.

The Events Resource Kit has been designed to streamline and explain procedures by providing resources to brigades and districts. It contains information on event organisation, suggested guidelines and resources for local events.

The kit will be available through district offices as staff can access the kit through the RFS intranet under Media and Public Affairs/Event Management. In the future it will also be available on the RFS volunteer website, MyRFS.

Once the kit is in full use, it will assist more local events to be published in the Bushfire Bulletin and MyRFS, so more people can share the experience of your local event.

If there are any enquiries about the new Event Management Resource Kit please email the Media and Public Affairs team at events@rfs.nsw.gov.au.

Crews competing in the structure fire exercise at the 2004 RFS State Championships in Queanbeyan. Photo by Meeka Bailey.

BAROOGA HOSTS RFS STATE CHAMPIONSHIPS IN SEPTEMBER

The 17th RFS State Championships will be held on Saturday 23 and Sunday 24 September 2006 in Barooga, Berrigan Shire.

The State Championships bring together the best of the best

"The State Championships bring together the best of the best Brigades from across NSW to do battle in a competitive but friendly environment," said RFS Community Education Manager Russell Taylor (Chairperson State Championships Committee).

"The 400 attendees are made up of about 260 RFS volunteers, who unquestionably enjoy the highest profile and have the greatest interaction with the community," he said.

In addition to the 14 senior teams, which includes the local Barooga Rural Fire Brigade, and 12 junior teams, invitations will again be sent to interstate fire services to participate in this event.

Barooga has been selected to host this years' event as the Berrigan Shire is credited as the birthplace of the RFS some 104 years ago.

Looking after sponsors and spectators

"The facilities of the Barooga Sporties Club allows us plenty of latitude to stage the events and affords the sponsors and spectators the best view of the action," Mr Taylor said.

"There will be lots of things to do and see at the Championships, including children's activities and advice for people on how to ensure that their home and family are safe from fire, but the emphasis is on the competition," Mr Taylor added.

"People who come along will be able to see the latest in firefighting technology and the high level professional skills of the firefighters who represent all quarters of the State and interstate. "It's a great event for the whole family and I would like as many people to come as possible. And of course it is free!"

SMOKE ALARMS COMPULSORY FROM 1 MAY

It is hoped that legislation changes which make it compulsory to install smoke alarms in all NSW residential properties from 1 May will reduce the death toll from house fires.

Eight people died and 44 were injured in house fires attended by RFS volunteers in 2005. In the past five years, 30 people have died and 231 were injured in house fires attended by the RFS.

SMOKE ALARMS PROVIDE THE EARLY WARNING RURAL RESIDENTS NEED TO SURVIVE FIRES

Smoke alarms provide the early warning rural residents need to survive fires that can rapidly engulf a home and its contents. Several fires attended by RFS volunteer firefighters last year involved tragic deaths of children or multiple family members.

Some of these may have been prevented if working smoke alarms detected smoke early and alerted people so they could escape. Residents of rural NSW face increased risk from house fires because they live in areas that are generally more isolated from fire services.

The *Building Legislation Amendment (Smoke Alarms) Act 2005* and the *Environmental Planning and Assessment Amendment (SmokeAlarms) Regulation 2006* commenced in NSW on 1 May 2006.

The legislation refers to residential accommodation across NSW and requires:

- the installation of one or more smoke alarms in buildings in which persons sleep,
- smoke alarms installed in such buildings must be operational, and
- persons do not remove or interfere with the operation of smoke alarms installed in such buildings.

A person who does not comply with the legislation is guilty of an offence (maximum penalty $550). A six month moratorium is in place that provides a window of time for owners to install smoke alarms without penalty.

The RFS strongly recommends owners install smoke alarms as soon as possible. Information on the RFS and NSW Fire Brigades websites offer guidance on smoke alarms. The RFS will also take part in an information campaign to advice communities of the smoke alarm legislation.

Tips on smoke alarms:

- Install at least one smoke alarm on each level of your home
- Use only Australian Standard 3786 smoke alarms
- Replace alkaline batteries when daylight savings changes
- Test smoke alarms once a month. Clean smoke alarms every six months – use a vacuum cleaner
- Get new alarms every 10 years, or earlier if they need replacing
- Ensure you have a home fire evacuation plan

RESCUE EXPO AT HAWKESBURY

Rescue Expo 2006 will be the largest emergency services expo in the southern hemisphere. To be held at Hawkesbury Showground over 19, 20 and 21 May, it will showcase the RFS and other emergency services.

The RFS display will highlight Community Education, Operations, Geographic Information Systems and Learning and Development. It provides an opportunity to promote our Service to the public, our peers and volunteers.

The Rescue Expo is open to the public and entry is free. For more information, go to www.rescueexpo.com.au

RFS OPEN DAY 2006

Following the success of the last two RFS Statewide Open Days, 2006 looks to be even bigger and better with some changes planned to improve public attendance - starting with the date.

The RFS Open Day is a platform for local brigades to promote the work volunteer firefighters do in serving their communities. There is also the opportunity to educate communities through FireWise.

THIS YEAR THE RFS OPEN DAY WILL BE HELD ON SATURDAY 16 SEPTEMBER

The date was changed from the second Saturday in October to 16 September following feedback from RFS volunteers and staff through a survey conducted after the 2005 RFS Open Day. One of the suggestions was changing the date to avoid clashes with other major events such as national sporting finals and NSW school holidays.

It also brings it closer to the start of the Bush Fire Danger Period in some northern parts of NSW where the fire season begins on 1 August or 1 September, and two weeks before the statutory start on 1 October when most parts of the State begin their fire season.

The survey provided valuable feedback and showed a growing participation and keen interest in the event. It will also help RFS Media & Public Affairs improve on previous Open Days.

Improved, two-way communication is high on the list of priorities this year to assist volunteers in planning their Open Day. A monthly newsletter will be produced to keep volunteers and staff in touch with

news on Open Day, provide tips on how to organise your day, and answer any questions or concerns.

A consultation committee will be formed to gain input from volunteers and staff for a range of purposes. For example, commenting on communication tools such as media releases, poster and community service announcements before they are distributed or how to best evaluate the Open Day to assess its success.

Brigade members are encouraged to send any feedback and suggestions to events@rfs.nsw.gov.au

Brigade members are encouraged to send any feedback and suggestions they have to events@rfs.nsw.gov.au so they can be included in the planning stage, be responded to individually or put in the newsletter so everyone can read about it.

Are you interested in being part of the Open Day Consultative Committee? Email events@rfs.nsw.gov.au.

Another suggestion from the survey was increasing media coverage to promote the event. The RFS Media and Public Affairs team is already talking with media outlets to provide sufficient notice and lead times.

Improving TV coverage

It is anticipated that the electronic broadcast promotion strategy will continue to rely, in part, on free community service announcements on TV, such as those aired last year. This is due to the costs involved in paid TV advertising.

However, RFS Media & Public Affairs is committed to improve TV coverage through better organisation of public service announcement placements and closer relationships with local stations.

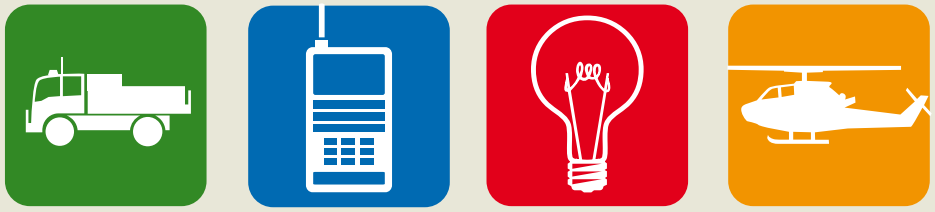
This will generate greater coverage and saturation. However, it is vital that brigades and district offices promote RFS Open Day in local communities, via your media outlets and relationships with local organisations and community groups.

Assistance with collateral such as media kits, posters, fliers and ideas for story angles and photo opportunities should assist. Watch out for the RFS Open Day newsletter for examples.

RFS Media & Public Affairs look forward to working closely with brigades and volunteers on the 2006 Open Day. The first newsletter will be published shortly.

In the meantime, if there are any queries please direct them through to events@rfs.nsw.gov.au.

OPERATIONAL BRIEF



The new Operational Brief has been launched by State Operations and will bring information directly from RFS Headquarters to RFS volunteers every month.

In December 2005 the first Special Edition of the Operational Brief gave an outline of the potential for severe grass fires across the state.

Many brigades used the suggested grass fire Standard Operating Procedures and undertook intensive grassfire training in the lead up to numerous grassfire outbreaks across the state in January 2006.

EACH EDITION OF THE OPERATIONAL BRIEF WILL GIVE RFS MEMBERS INFORMATION ON STATE-WIDE PROJECTS AND INITIATIVES

The March 2006 edition provides information on GRN Digitisation, ICON (Incident Control Online), the Firefighters' Pocketbook and 2005/2006 season aircraft contracts.

The Operational Brief can be downloaded from myrfs.nsw.gov.au or is available from your district/zone/team office each month.

From top: Crews practice chasing a moving target in this picture.
Photo by Rolf Poole

Crews from Warringah Headquarters Rural Fire Brigade were one of many brigades that conducted grassfire training in preparation to assist western NSW brigades who faced a difficult grassfire season.
Photo by Rolf Poole

The *MyRFS* login page.

INTERSTATE DEPLOYMENT

500 PERSONNEL - OUR LARGEST INTERSTATE DEPLOYMENT EVER!

The largest interstate deployment of RFS volunteer firefighters and incident managers occurred in January 2006 when 500 personnel from around NSW went to Victoria and South Australia.

THE FIRST TIME GROUND CREWS HAD BEEN SENT TO SOUTH AUSTRALIA

It was also the first time ground crews were sent to South Australia, only liaison officers and aircraft had been sent before.

FIREFIGHTERS FROM ALL RFS REGIONS

Firefighters travelled from all RFS Regions with firefighters from Regions West, South and East and incident management personnel committed from Region North.

Crews undertook a range of activities from backburning to mopping up. Many drove hundreds of kilometres, others were transported by aircraft to provide quick backup on interstate tankers.

Relationships developed with firefighting colleagues from Victoria and South Australia, as well as the other states who rallied to help.

The sense of community and camaraderie stretched over state borders. The RFS once again proved that it has the ability to protect its own, while supporting those in need.

HOW THE FIGHT WAS WON

Interstate Deployment Timeline

Story by Matt Schroder

Saturday 21 January 2006
Following extreme weather conditions, with no end in sight, the South Australian Country Fire Service (CFS) requests assistance from the NSW Rural Fire Service (RFS). That evening, a total of four strike teams have been activated and are on their way to South Australia. Teams South 1, 2 and 3 come from Region South, led by Strike Team Coordinator Supt. George Alexander. South 4 is a composite team from both Region South and West.

Sunday 22 January 2006
Strike Teams South 1, 2, and 3 travel from their stopover at Buronga in Wentworth Shire to South Australia where they are deployed to a number of fires. South 1 and 2 both work on the Ngarkat Fire which by 0927hr has grown to 30,000 ha. South 3 is deployed to the Robertstown Fire. South 4 is deployed to the Danggali Conservation Park in northern South Australia, but is then returned home. The RFS provides the CFS with further assistance in the form of Incident Management Team (IMT) personnel. Four RFS staff are sent to the Lameroo IMT, looking after the Ngarkat Fire.

Monday 23 January 2006
The three strike teams remain separated for the night, South 1 and 2 stay at Keith, while South 3 stays at the State Training Centre in Adelaide Hills. At 1115hr all strike teams are working together on the Ngarkat Fire, blacking out and responding to spot fires. The Ngarkat Fire has now grown to 80,000ha. South 1, 2 and 3 leave the fireground at 1900hr with several vehicles requiring maintenance.

Tuesday 24 January 2006
South 1, 2 and 3 are addressed by CFS Chief Officer Euan Ferguson and RFS Liaison, Assistant Commissioner Keith Harrap, who thank them for their time and effort. Crews of South 1, 2 and 3 board buses departing for the Riverina. The SES transports the 14 appliances and three command vehicles of the Strike Teams to Brukunga State Training Centre for maintenance.

Wednesday 25 January 2006
Strike Teams South 1, 2 and 3 are replaced by South 5, 6 and 7. Crews for these strike teams depart from Albury and Griffith and pick up additional crews en route to Brunkunga State Training Centre. Meanwhile the Victorian Country Fire Authority (CFA) requests assistance from the RFS to try and contain fires burning out of control across that state. In response the RFS activates Strike Teams South 8, 9 and 10 which are deployed to the Grampians Fire. Additionally, Strike Teams East 49, 50, 51 and 52 are deployed to Albury to be on stand by. Two more strike teams are flown to Victoria to crew on CFA appliances. They are East 53 and 54, and each comprise 96 personnel. At 1900hr crews of South 5, 6 and 7 arrive at Brukunga State Training Centre, where they are joined by strike team East 48.

Thursday 26 January 2006
East 53 and 54 are flown to Melbourne and from there bussed to the Grampians Fire where their shifts start immediately. East 53 is assigned the day shift and East 54 the night shift. South 8, 9, and 10 continue working on the Grampians Fire. South 5, 6, 7 and East 48 remain in South Australia on standby to respond to any outbreaks. During the day, South 7 responds to a fire in the Mount Torrens area, which they successfully extinguish by 1440hr. At 2000hr East 48, South 5, 6, and 7 are released from CFS control and re-deployed to assist the CFA in Victoria. East 49, 50, 51 and 52 are moved from standby in Albury to Healesville, Victoria, where they spend the night.

Friday 27 January 2006
East 49, 50, 51 and 52 are tasked to the Melba Complex (Kings Lake) Fire, while South 8, 9 and 10 continue working on the Grampians Fire along with East 53 and 54 who continue their allocated shifts. East 48, South 5, 6, and 7 depart their overnight stop of Bordertown and travel into Victoria and are tasked to the Grampians fire. South 5 and East 48 are tasked to the Glenelg River Sector of the fire, while South 6 and 7 are tasked to Victoria Valley Sector.

Saturday 28 January 2006
Easing weather conditions allows proposed deployment of Strike Teams South 11, 12, 13, 14, 15 and 16 to be cancelled. South 5, 6, and 7 along with East 48 work for most of the day on the Grampians fire in the Glenelg River Sector. At 1800hr the crews of East 48 depart by bus to Melbourne, and are flown home. East 55 is deployed to transport their vehicles home, and South 5, 6, and 7 return home the following day. South 8, 9 and 10 along with East 49, 50, 51 and 52 are stood down.

Sunday 29 January 2006
East 48, 53 and 54 are flown home. East 49, 50, 51 and 52 drive their vehicles home, while East 55 drive the vehicles of East 48 home. South 5, 6, 7, 8, 9, and 10 also drive vehicles back to their home districts. The RFS interstate deployment comes to an end.

Australia Day was spent in Victoria on interstate deployment. Photo by Kirsty Vickers

RFS crews backburning on the Kinglake fire, Victoria. Photo by Karen Gorrie

NINE FLAMIN' DAYS AND THREE STATES

By David Bent, Thurgoona Rural Fire Brigade Task Force Commander driver/assistant

At 1400hr on Saturday 21 January 2006 Superintendant George Alexander (RFS Hume Zone Manager) received notification from Region South that a Strike Team was required for deployment to South Australia.

LITTLE DID GEORGE REALISE THAT HE WOULD BE STRIKE FORCE COMMANDER OF FOUR STRIKE TEAMS DEPLOYED INTO THREE STATES

Little did George realise that he would be Task Force Commander (TFC) of four Strike Teams, that the Task Force would deploy into three states, that he would clock up 3,500km and that his last Strike Team would cross back into NSW nine days later.

Over those nine days the Task Force would fight fires at Robertstown in the very northeast of South Australia (6,000ha), Ngarkat Conservation Park south of Murray Bridge (100,000ha), Mount Torrens in the Lofty Ranges outside Adelaide (20ha) and to complete the deployment the Hamilton Division of the Grampians fire in Victoria (130,000ha).

The Strike Teams were sourced from Hume, Mid Murray and Murrumbidgee Irrigation Area/Hay with a Strike Team from Lower Western (South 4) sent off immediately to the Danggali Conservation Park (Northern SA). South 4 returned to NSW the following day.

Later in the week the Task Force was joined by a Strike Team from Sydney Basin (East 48).

By 1600hr the Task Force was moving, from numerous locations all over the Riverina, to meet at midnight in Buronga for deployment the following morning into South Australia.

THE COMPOSITION OF THE TASK FORCE WAS:

Task Force Commander (TFC) Superintendant George Alexander
TFC Driver/Assistant David Bent

South 1 (5)	**South 2 (6)**	**South 3 (7)**	**East 48**
GO Bob Kuhne	S/Dep Peter Middleton	GO Peter McLean	GO Garth Eggleston
Thurgoona 1	Yanco 7	Bunnaloo 1	Mulgoa 9
Jindera 1	Beelbangera 7	Moulamein 1	Shanes Park 9
Lavington 1	Goolgowi 7	North Wakool 1	Hoxton Park 9
Holbrook Central 1	Rankin Springs 7	Moama 1	Kemps Creek 9
Burrumbuttock1		Koraleigh 1	Luddenham 9

During the deployment the original volunteers were "bussed" home and "new blood" took over the vehicles. At this time the Strike Teams were re-numbered to South 5 (Capt Darren Gugger), South 6 (GO John Smith) and South 7 (GO Lindsay Lashbrook). East 48 (Sydney Basin) joined the Task Force in South Australia with five Cat 9 strikers.

Volunteers answer the call

Over time, some 107 volunteers and one Salaried Officer were involved with the Task Force. The addition of four salaried officers in the Lameroo Incident Management Team (IMT) made a significant contribution to the co-ordination with South Australian Country Fire Service (CFS) during the time spent at the Ngarkat Conservation Reserve.

Members of the changeover Strike Teams were aware on arrival that their deployment was pre-emptive and took into account the potential weather conditions and that the CFS had been under pressure for several weeks with major fires. This "standby" deployment is never anyone's choice of activity, however, after a very clear and welcoming meeting with the CFS Chief Officer (Euan Ferguson) all members were aware that the Task Force was very much needed.

Extracts from the Task Force Commanders log best describe the "9 Flamin days" and were used to create the timeline on page 30.

CFS really looked after us

The writer of this article would be in severe trouble if he did not report on the magnificence of the welfare and compassion received throughout this odyssey. In particular, the CFS went out of their way to ensure, as far as possible, the comfort of all. They were genuine in their gratitude. No doubt we learnt from each other in an environment of mutual trust and assistance.

The community of Cavendish (population less than 100) were given the job of maintaining the Staging Area near Hamilton Victoria. Working in shifts, sometimes 24 hours a day, the Cavendish ladies supported by the Red Cross and Hamilton Lions provided up to 800 meals a day, and every one of them was worth having.

Of course, their genuine gratitude and offers of assistance were just wonderful. It was hard to realise that it is their area and industry that has been ravaged. Even so, they certainly put themselves out for us.

RFS crews return from Victoria.
Photo by the *Border Mail Albury*

HOW RFS FIREFIGHTERS ARE DEPLOYED INTERSTATE

By Meeka Bailey, RFS Media Officer and Matt Schroder

Organising a force of 500 in order to provide fast and effective support for tired firefighters in neighbouring states requires a considerable logistical effort.

Issues such as where the fires are, what types of tankers and firefighting skills are required, the duration of the commitment, the fire threat at home and the availability of volunteers all affect what crews are assembled and deployed.

THE ENTHUSIASM OF RFS VOLUNTEERS MEANS THAT MANY HUNDREDS WANT TO ATTEND

The enthusiasm of RFS volunteers also means that many hundreds of people want to attend, while a limited number are required.

While most RFS members, particularly those who actually attended the South Australian and Victorian fires, were impressed with the organisational efforts of the RFS and our interstate counterparts, some were left with questions.

How deployment decisions are made

These questions most directly focused on who was selected and why.

Comments made at the time of the interstate deployment included:

"It seems that when the big jobs are on, the RFS forgets about its firefighters/members from out west…we always seem to be the last option…even when we have big jobs in the west, you see fit to send your metro brigades."

And:
"We…would like to know why our crew was requested to stand down and not required for deployment to Vic/SA fires. On Wednesday 25th at approx. 1500hr the Captain was notified that that our crew was required for immediate deployment. At approx. 1630hr whilst crew members were making their way to the station, they were informed to stand down."

This article will help to explain the State Assistance Procedures, how the request is made from other states for RFS resources, and how they are selected.

State Assistance

The RFS traditionally assists adjoining states and territories – Queensland, Victoria, South Australia and the ACT.

A request is received from a senior officer or CEO from the interstate agency – this could be a fire authority such as the Country Fire Authority Victoria or the South Australian Country Fire Service, or it could be from a public land manager such as the Victorian Department of Sustainability and Environment.

This request is made to the RFS Commissioner, Assistant Commissioner or State Operations Coordinator. The decision to supply crews is made by the Commissioner and Assistant Commissioner of Operations and Regional Management.

State Operations then requests more details from the interstate agency. Where will they be deployed, what work will they do, how long

Top: RFS firefighters are briefed by their Country Fire Service colleague as they work on the Ngarkat Fire in South Australia. Photo by Matthew Gardiner

Centre: The cricket score for a match between NSW and Tasmanian firefighters during a well-earned break. Photo by Kirsty Vickers

will they be required. This information is vital to ensure RFS crews are safe and effectively tasked and that the interstate agency gets Strike Teams with the right skills, experience and equipment.

WHERE WILL THEY BE DEPLOYED WHAT WORK WILL THEY DO HOW LONG WILL THEY BE REQUIRED?

From these conversations the number of firefighters, tankers, aircraft, incident management personnel and any other resource is determined. Then it is a question of where in NSW is best to get these resources.

The following questions are asked at this stage:

- What is the distance to be travelled
- How long will crews be required
- What skills are needed (crews from forested areas of NSW are sent to forest fires interstate, those with grassfire or urban interface skills are sent to comparable areas interstate)
- Will they be working on local tankers or taking their own (it's quicker to fly crews from major centres such as Sydney to Melbourne if they are manning Victorian tankers, but faster to send southern NSW crews in their own vehicles by road)
- What is the regional fire threat so resources are not depleted (if there are fires in northern Victoria then southern NSW is likely to experience extreme fire danger – similar for southern Queensland and northern NSW)
- Have particular regions had a difficult season already, or had previous out of area commitments.

Requests to regions

A region or number of regions may be requested to supply complete Strike Teams, generally made up of five appliances. The State Operations Coordinator discusses the requirements with regional officers (either the Regional Operations Officer or the Major Incident Coordinator).

Similar questions then occupy regional officers when determining what districts to request resources from. Where is the current fire threat? Who has the appropriate skills? Where are the transport hubs? Who can get there on time?

Generally, the region would request adjoining districts to put together a Strike Team as it would be difficult to coordinate personnel and tankers from districts that are distant from each other. The region rings district officers to canvas what is available.

Gathering resources

Districts then gather the resources, determining exactly what tankers and people will go. While the lives of volunteers are always in the mind of organisers during these events, it is at this stage that the local conditions and availability of RFS members really comes into play.

What crews are actually able to go when needed, for the time required and with the skills and equipment required? Who can be ready first? Pre-planned Strike Teams are in place in some areas. But have local conditions changed? Is the local fire threat too great? Is harvest on? Is it school holidays, or in this case, the Australia Day public holiday?

Some districts will approach particular brigades they know can spare the personnel and vehicles. Composite crews might be arranged. Others will send out a page to get recruits. When the page goes out there is never a shortage of willing and able personnel. Some are in the station and ready to go, but another crew has rallied earlier. Sometimes there isn't a place for everyone.

Conditions also change. In January, Strike Teams were turned back en route to their interstate destinations because of welcome rain. The requirement for crews was no longer there.

RFS Regional Managers discuss some of the issues of concern when requesting crews for the January deployment.

Dominic Lane
Chief Superintendent
Regional Manager – Region West
Region West provided the first RFS ground crews ever deployed to South Australia because of their proximity to that State. We were very concerned about the fire situation in South Australia and Victoria, however, at that point in time we had very hot, very dry conditions across the region. This was combined with very heavy fuel loads, particularly in the grasslands. We contributed

to a task force that went to South Australia, although were unable to provide further support due to the high fire danger across the region that we needed to be fully prepared for.

Ian Thomas
Chief Superintendent
Regional Manager – Region North
Leading up to January we had a very busy fire season in Region North, but were still concerned about assisting South Australia and Victoria with their fires. We looked at the fire danger across the region and the potential for fires was still there, so we needed to keep our crews where they were. However, we did not believe we would require Incident Management Teams (IMT) for any fires that developed, so we decided to send IMT personnel.

Mick Beltran
Chief Superintendent
Regional Manager – Region East
During the January deployment 198 firefighters were flown from Sydney to Melbourne because they were working on Victorian tankers. The crews were sourced from Region East because it was quicker and easier to assemble them.

Once we were notified of the urgent need for RFS firefighters to go to Victoria we were given a few hours to find crews and have them on planes. With such short notice there was no time to address each individual district – so we set a boundary approximately one hour's travel time from the airport. We operated on a first in first go basis, so once the first 96 were confirmed they were deployed. We then had our second deployment to fill, and were given 12 hours for this. Where possible, we tried to accommodate as many of those who missed out on the first deployment in the second. All the while we had to make sure we had not only enough firefighters, but also enough crew leaders, drivers and special qualifications in our crews.

Jeff Lucas
Regional Manager – Region South
Our crews came mostly from the Murray and coast as they are close to the borders and were required straight away. Some of the crews were tired as we had experienced heavy fire activity in the Riverina area, but they were still keen to cross over the border and help out their southern counterparts. We chose a few brigades from each area so we could maintain fire protection across Region South. A few crews were turned back en-route due to rain which caused some angst, but generally this was met with relief as the fire threat had eased. The good work of Region South volunteers and staff ensured that they were effectively deployed into both South Australia and Victoria.

Mark Crosweller
Assistant Commissioner
Executive Director Operations and Regional Management
The Victorian and South Australian deployment were important learning experiences for the RFS. They taught us a lot about how we can organise our interstate response. We are continuing to try to improve the processes we use so they are of the most convenience to volunteers. Feedback from volunteers on these issues is always welcome.

BUNDEENA BLOWS IN TO WINDSWEPT GRAMPIANS

By Maggie McKinney,
Captain Bundeena Rural Fire Brigade

Local History was made on Australia Day 2006. Six Bundeena volunteer firefighters joined the Sutherland Task Force to assist Victorian Country Fire Authority bring a serious outbreak of fires under control. This is believed to be the first volunteer firefighters from Bundeena had been tasked interstate.

AS WILDFIRE SWEPT ACROSS VICTORIA, FORCES WERE RUNNING THIN

As wildfire swept across Victoria and ground forces were running thin, firefighters from NSW were transported by air and coach to the Grampians, northwest of Melbourne.

By the time we arrived, the fires on the western side of the mountains were under control and the NSW contingent set about the task of mopping up.

Not the a favourite task, "mop up" ensures the fire ground is "cold" or completely extinguished and is necessary to prevent re-ignition by way of embers, carried by the wind to unburnt areas.

Crews were made up of RFS Crew Leaders and CFA drivers into two, five tanker strike teams working through day and night shifts.

Watching out for "widow makers"

The safety focus was the "widow makers", enormous red gums hollowed by years of water and fire damage that burnt and fell, silent and deadly to the ground.

Four days later, tired dirty and weary, the Task Force landed in Sydney to a warm welcome from the RFS Commissioner Phil Koperberg and a grateful acknowledgement from CFA CEO Neil Biddy.

Interstate camaraderie and email friendships were established with a healthy swapping of photos and "yarns", which, of course, get bigger with the telling.

A special thanks to our wonderful colleagues who provided a much appreciated and sumptuous welcome home breakfast at the station. It's great to have "family".

Top: The Bundeena crew ready for action.

Above right: RFS Commissioner Phil Kopeberg acknowledges the hard work done by the volunteers with a warm handshake.
Photo by Ben Loicono

TRAINING

ASSESS YOUR BRIGADE'S TRAINING NEEDS

One of the most common questions asked of RFS Learning and Development Systems is "What drills should we do at the brigade?"

EVERY BRIGADE IS DIFFERENT AND SO ARE THEIR TRAINING NEEDS

There are no straight or simple answers. Every brigade is different and so are their training needs. To develop members from scratch, start with practice of basic skills, then complete simple drills, then move onto combination drills, and finally onto exercises.

Over the next few issues of the Bushfire Bulletin we will examine each of these areas.

Why drills are important
So what is a drill? In broad terms, a drill is a practice of a set of related skills. For example, a simple hose drill consists of such skills as hose carrying, bowling and coupling, nozzle holding, manoeuvring with the hose, hydrant operation, hand signals, words of command and team work.

If a particular skill is not used often enough it may be forgotten or you may become rusty.

Drills allow different members of the brigade to be able to work in a variety of roles. As it is never known who will turn up to respond to each call, all members need to know the different jobs and how they function.

To get the answer to the question about drills, it is necessary to determine which drills are needed. There are a few steps that can be followed to get an idea of the training needs for your brigade. This is called a Training Needs Analysis. Once training needs have been determined, activities and drills can be identified to address those needs.

Training Needs Analysis

Step 1.

Ask the training team to answer the following questions and create a list of the answers:

1. What type of incidents do we respond to?
2. What type of incidents might we respond to?

Step 2.

Review and list the skills needed for each of the incidents on the list.

For example, if one of the answers was that the brigade responds regularly to bushfires, the topics for training could include:

- Traffic management at bushfires
- Off road driving
- Emergency drills
- Weather
- Fire behaviour
- Hose lays and hose setups
- Triage of houses in bushfire areas
- Local knowledge
- Use of portable pumps
- Fireground safety
- Hydration
- Preparation for out of area deployments
- House to house property protection
- Navigation
- Working with aircraft

Step 3.

Review this list and separate the 'practical' from the 'theory'. Some will fit on both columns.

Practical	Theory
Traffic management at bushfires	Traffic management at bushfires
Emergency drills	Fire behaviour
Local knowledge	Triage of houses in bushfire areas
Off road driving	Fire weather
Use of portable pumps	Hydration
Hose lays and hose setups	Navigation
	Aviation safety

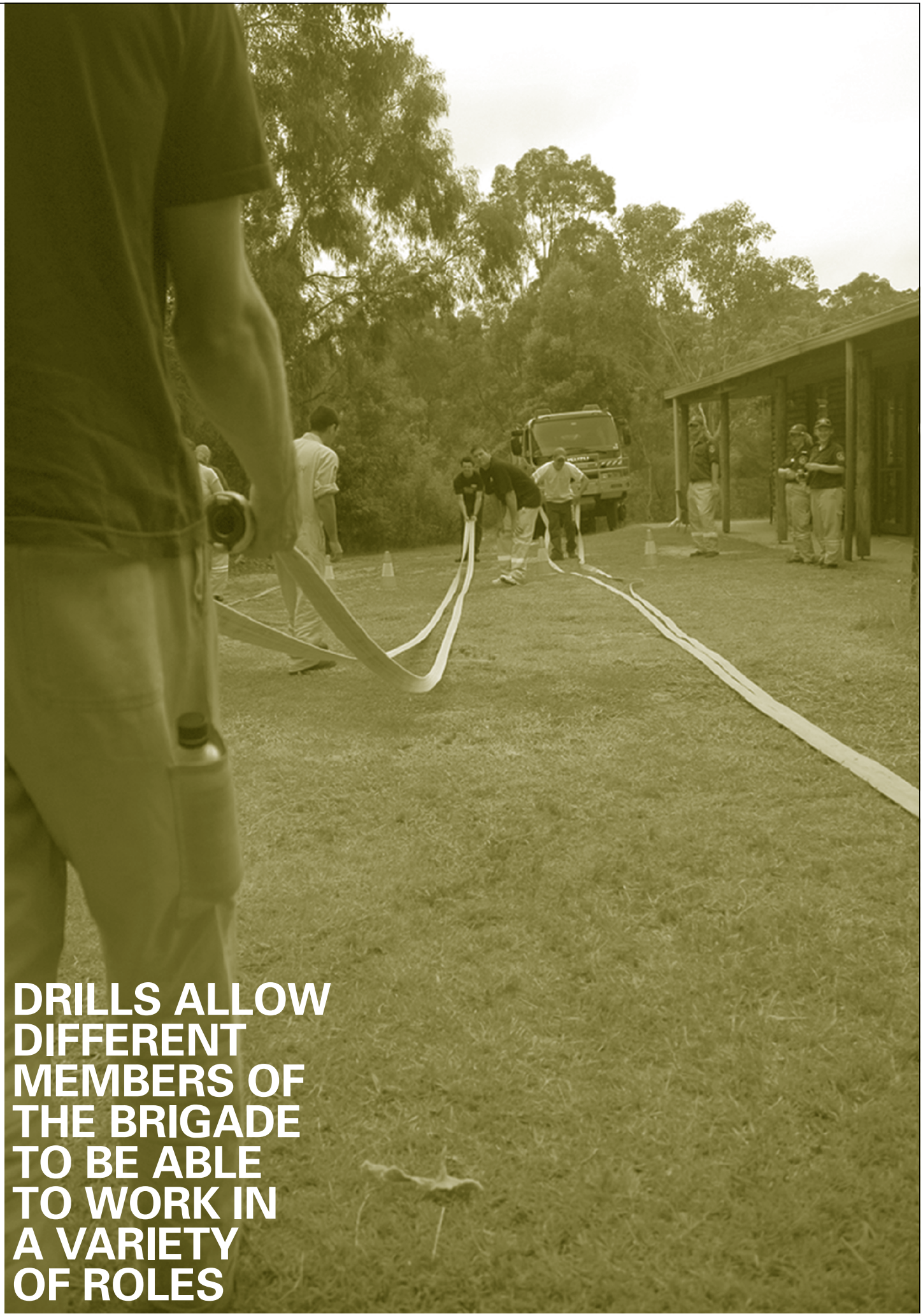
You will find that there will be number of topics that will come up again and again regardless of the type of incident you consider.

Step 4.

Because you have a list you can now work on how to practice these skills.

You have a number of options from here.
1. Divide the topics up between various instructors and set dates for when they can be practiced or revised.
2. Set up some cards (e.g. "drill of the week" cards) with practical topics that an officer can take and practice with a crew.

Training new recruits in hose skills.
Photo by Bernie O'Rourke



DRILLS ALLOW DIFFERENT MEMBERS OF THE BRIGADE TO BE ABLE TO WORK IN A VARIETY OF ROLES

Training encourages team work.
Photo by Dan Meijer

Step 4. cont

For example, set a task for a crew to:
1. Navigate to a location
2. Once at the location they are to do area familiarisation (e.g. locate known water sources)
3. Draft water out of a local dam/stream with a number of lengths of hoses off the pump
4. Have the officer get the crew to conduct the bushfire overrun (emergency) drill
5. On occasions, as they are returning to the fire station, have the officer stop and get the crew to get the portable pump or other equipment to work.

You have covered five of the 13 listed skills practiced in this sequence! Not to mention assisting with team building and contingency skills with every practice.

Practicing basic skills

Drills such as rolling and bowling hose can seem boring and repetitive but they are the single most important skills that any firefighter needs to have. To be good at any skill under emergency conditions and to be able to deal with contingencies, practice them regularly.

So, now that you have identified the skills your members need to practice, move on to running specific drills. We'll cover how to do that in the next edition.

FUN WITH TRAINING

By Terry Neal, Training Officer, O'Connell RFB

A relatively low number of incidents during the fire season prompted O'Connell Rural Fire Brigade (RFB) to hold a training and competition day on Sunday 12 March 2006.

Located between Bathurst and Oberon in the RFS Chifley Zone, O'Connell brigade members were keen to hone their skills and demonstrate their firefighting capabilities.

AFTER A VERY QUIET FIRE CALLOUT PERIOD, THE O'CONNELL BRIGADE RESPONDED TO FOUR FIRE CALLS IN THE FOUR DAYS PRIOR

Coincidentally, after a very quiet fire callout period leading up to this day, the O'Connell Brigade responded to four fire calls in the four days prior to their training event!

Competing teams

It was organised as a 'competition type' activity where the O'Connell Cat. 1 crew competed against the Cat. 7 crew in a round robin activity of individual training topics.

The first was a timed exercise where once the two team Captains were notified simultaneously, the time taken for all the two teams to arrive safely at the Brigade shed was recorded.

Next was another timed activity to see how fast they can get dressed in their full personal protective apparel, putting on boots and helmets then getting into their respective trucks, put on seat belts and drive out of the shed.

The third activity involved the individual team members being given a card with an appliance, tool, equipment etc marked on it. The team member had to locate the items on their truck, remove it, bring it to the checking desk, return it to the truck, secure it and return to 'tag' the next member - who then gets his card.

Altogether they had to find, have checked and return nine individual items.

The fourth activity tested driving technique. A designated driver and an outside assistant had to get their truck around an obstacle course, both forward and backwards, complete a five point turn and return back through the obstacle course to reverse the truck back into the Brigade shed - in the quickest time, and with no verbal communication!

Who's best at map reading?

After morning tea break, map reading was tackled. Each truck was given six local area map co-ordinates, tasked to locate strategically placed drink cans at those co-ordinates and return to a nearby picnic ground in the shortest time. They were instructed to remain within normal speed limits and were penalised if they returned too quickly.

The next activity was to travel to the nearby Fish River and perform a drafting exercise, with two linked canvas hoses - to put water onto a target in the quickest time.

The final activity was a hose draining and rolling up exercise where the two canvas hoses were drained and rolled up, secured and returned to their respective lockers in the quickest time.

Family focus

This completed the training /fun day activity and all those who participated went to the nearby hotel for lunch with their families. The brigade gave out over 20 RFS sample bags to children at the hotel that afternoon.

Overall it was a fun day and all eight members who participated in the day learnt something, practiced their skills and had a great time.

Photo: O'Connell RFB Deputy Captain Graham Kilby drafts water from the Fish River during the brigade's training/fun day.

RFS boat crews practice their vessel based firefighting skills with a simulated commercial ferry fire rescue.
Photo by Ron Boyce

BOAT CREWS TEST THEIR SKILLS

By Dave Kissick, Berowra Waters
RFB Learning & Development Officer

Berowra Creek and Fisherman's Point on the Hawkesbury River were the venues for the inaugural "Combined Districts Water-borne Brigades Training Exercise".

Held on March 4, the day involved crews from seven brigades onboard nine fireboats representing Gosford, Warringah and Hornsby districts.

A briefing was held at Camp Knox and the respective Officers in Charge were given task sheets.

Hornsby Communications Brigade also attended, setting up forward command at Camp Knox. Hornsby Catering Brigade provided pre-packaged lunches, which were greatly appreciated after a busy morning session.

Berowra Waters Captain and Exercise Co-ordinator, Dave McMonnies, had long seen the need for an event of this type. He said "The volunteers of these specialist fire boat brigades needed an opportunity of this sort to test their skills. A land-based field day is not an option as almost all our firefighting work is vessel-based."

Crews working together

The crews were put through a rotation of four scenarios and an independent judge assessed each crew.

Multiple crews were responded to each incident so the brigades could experience working alongside other teams and to develop an Incident Control System.

THE RFS TEAMS ALSO HAD TO WORK ALONGSIDE THE LOCAL VOLUNTEER RESCUE ASSOCIATION AND COASTAL PATROL

The RFS teams also had to work alongside the local Volunteer Rescue Association and Coastal Patrol. These agencies participated in a rescue of victims from a simulated ferry fire.

The other scenario incidents involved a waterfront structure alight, bush alight with fire survival, bush alight with structure threatened and simulated sinking vessel.

Overcoming communications difficulties

Throughout the day, there were a few difficulties with radio communications given the remote area, but as Capt. McMonnies said, "These are problems we have to deal with whenever we have an incident in these isolated places."

"Given a couple of engine and pump problems we experienced, we must learn to improvise as the NRMA don't come out to us. We can also use this day to rectify a few little hiccups within our management systems."

RFS Hornsby/Ku-Ring-Gai District Learning and Development Inspector Wayne Reeve attended the day as an observer and was impressed with the level of commitment shown by the participants.

"I would really like to see this event become an annual fixture on our District Training calendar," Inspector Reeve said.

Doing it again

All the Brigades who attended were already looking forward to next year and Capt. McMonnies is already busily planning a bigger and better event.

For the record, the winner of the overall point score was Berowra Waters Boat Bravo. The other brigades vowed to give them a real challenge next year but Bravo OIC, Deputy Captain John Ringrose, has stated his crew won't give the trophy up without a fight.

Participating brigades
Hornsby Communications
Hornsby Catering
Berowra Waters – *Boat Alpha*, *Boat Bravo*, *Boat Charlie* support dinghy, *Boat Delta* support dinghy
Brooklyn Boat
Dangar Island Boat
Brisbane Water Boat 15
Bar Point Boat 15
Scotland Island Boat

Centre: The fleet. The inaugural Combined District Water-borne Brigades Training Exercise was held at Berowra Creek and Fishermans Point on the Hawkesbury River.
Photo by John Muirhead

RFS TRAINS THE CORPORATE SECTOR

By Ivan Plavec, RFS Headquarters Business Development

In 2005, the RFS launched a series of training courses to meet demand from the corporate sector for fire awareness and suppression training.

Answering requests from business

This training has been arranged in response to requests from business organisations for their staff to be offered the same type of training courses that the RFS currently offers to volunteers.

The RFS now offers three courses on a commercial basis. These are First Attack Firefighting, Bushfire Awareness Training and Bush Firefighter (Stage 1) training.

First Attack Firefighting
This course provides commercial organisations with fire extinguisher training for their staff. The course runs for two hours and covers the use of extinguishers and information on the risk of fires in the workplace or home and actions to be taken in the event of a fire. The course also has a practical component, which sees participants extinguish fires on a high-tech gas-fired hot tray.

Bush Fire Awareness (BFA)
BFA training provides non-firefighting personnel, who need to provide support roles on a declared fireground, with training and information on the risks of working on the fireground, hazard identification, basic bushfire behaviour and precautions to take in case of an approaching fire front. Successful participants are issued with a photo ID endorsed by the Bush Fire Coordinating Committee, which provides entry to the fireground under specified conditions.

THE RFS IS WORKING CLOSELY WITH UTILITIES IN ELECTRICITY, WATER, GAS AND COMMUNICATIONS SECTORS

The RFS is working very closely with utilities in the electricity, water, gas and communications sectors to implement BFA training. In the electricity sector the courses have been incorporated into the apprentice training framework, which will see several hundred apprentices trained annually in bushfire awareness.

Bush Fire Fighter (Stage 1)
This course is presented over three full days and includes components such as safety training, fire behaviour, PPE, use of auxiliary equipment, operation of a fire tanker and first attack methods. This course, however, does not entitle participants to a RFS Bush Firefighter certificate since such accreditation requires ongoing competency training through a brigade.

Volunteer instructors

The RFS has selected volunteer firefighters as instructors wherever possible. All instructors are required to hold Rural Training Coordinator (RTC) qualification and have significant firefighting and training experience. Volunteers who are engaged as instructors are employed as casual staff to deliver the training and work as part of the Business Development Team situated at RFS Headquarters.

The income generated through the delivery of these courses is used to fund programs for volunteer development. Initiatives include the purchase of equipment for districts and brigades, infrastructure for training facilities and a program to send volunteers to training courses interstate and overseas. In 2005 the RFS sent three volunteers to attend the International Structural Firefighting course in Malaysia. Similar initiatives are planned in 2006.

For further information about the corporate sector training program please contact Duncan Sutherland or Ivan Plavec on 87415174 or write to corporate.training@rfs.nsw.gov.au.

Top left: Volunteer instructor Stuart Frost providing fire extinguisher training for local government employees.

Top right: The Bush Fire Awareness Course at RFS Headquarters on 31 January. Instructor is Lou Zamberlan, Captain of Ourimbah Rural Fire Brigade in Wyong.

It's important to train using the actual tools you would use at a fire.
Photo by Bernie O'Rourke

PUTTING OUT FIRES IN CORPORATE SECTOR

By Ivan Plavec, Business Development Officer

The RFS is now providing first attack firefighting training for the corporate sector.

THE THREE HOUR COURSE TRAINS EMPLOYEES IN THE USE OF FIRE EXTINGUISHERS IN THE WORK PLACE

The three hour course trains employees in the use of fire extinguishers in the workplace and provides information on the types of fires and the actions to be taken in the event of a fire, including the use of emergency evacuation procedures.

Real fire experiences

The course structure includes a theory session followed by practical exercises where trainees put out a fire using a range of extinguishers.

Instructors create a live fire simulation using a high-tech gas fired hot tray, which allows for a fire to be lit in a controlled environment.

Experienced, volunteer instructors who hold Rural Training Coordinator (RTC) accreditation and the necessary skills in presentation conduct the training.

Meeting OH&S responsibilities

Market research suggests that there is a great demand for this type of training to enable employers to meet their OH&S requirements and provide their employees with fire safety training.

Funds generated by this training program are used to provide facilities and equipment for RFS volunteers throughout NSW.

More information about the course is available from the RFS Business Development Unit on 8741 5174. Bookings can be made by email to corporate.training@rfs.nsw.gov.au

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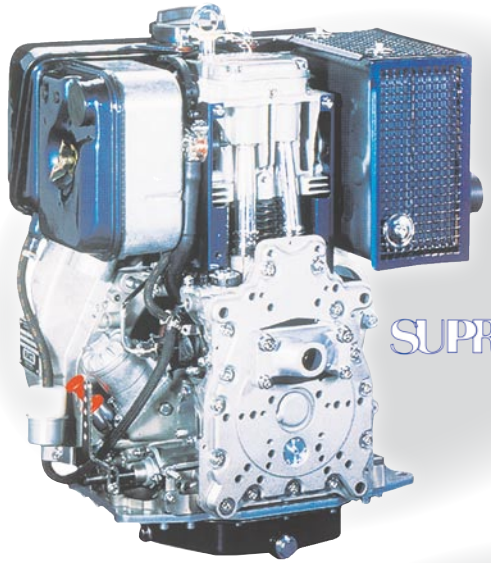

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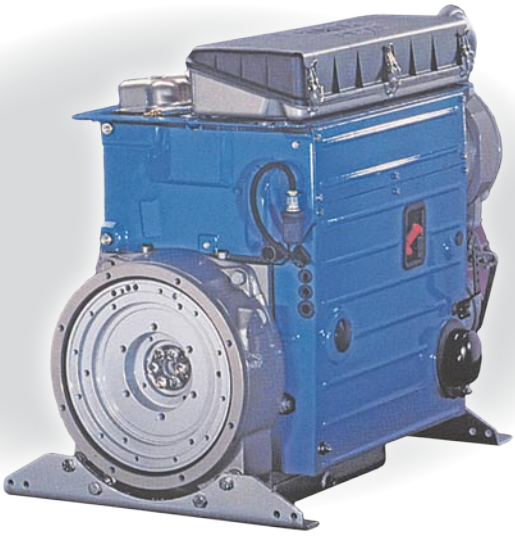

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RFS Air Training Takes Off

RFS Aviation conducted training for Air Base Operators and Aviation Radio Operators at Crookwell Air strip from 31 March to 2 April 2006.

There were 43 participants involved. As well as RFS members, mostly from Region South, a volunteer and salaried officer from the ACT also took part.

43 PARTICIPANTS TOOK PART IN RADIO OPERATOR AND AIR BASE TRAINING COURSES

The Aviation Radio Operator (ARO) course trains volunteers on radio use, standard phrases, typical radio calls, basic procedures, airspace organisation, flight following and developing aviation communications systems.

The Air Base Operations (ABO) course trains volunteers to set up an air base, aircraft marshalling signals and techniques, uses of firefighting retardants and foams, aviation fuel and refueling, accident and emergency procedures and ground safety.

Three aircraft and nine teams involved
Aircraft involved in the training included:
- *Bomber 277,* Air Tractor 802 - Kennedy Air Ag.
- *Firebird 239,* Bell 206 Jet Ranger - Heliaust
- *Firespotter 268,* Cessna 182 - Curtis Aviation

The nine RFS districts/zones/teams attending represented a wide area of the New South Wales countryside from the coast to west of the divide. They were Southern Tablelands Zone; Lake George; Canobolas; Wingecarribee; Illawarra; Shoalhaven; Riverina; Riverina Highlands and South West Slopes.

BUSHFIRE BULLETIN READER SURVEY

Overall, how appealing did you find this edition?

- ❑ Very appealing
- ❑ Fairly appealing
- ❑ Neutral
- ❑ Fairly unappealing
- ❑ Very unappealing

Comments: .....

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Compared with 12 months ago, would you say the Bushfire Bulletin is now:

❑ A lot better ❑ Slightly better ❑ Much the same ❑ Not quite as good ❑ A lot worse

For each of the following, please indicate or comment on the features you were interested in reading in this issue (tick column applicable)

	Yes, I was interested	No, I wasn't interested	I will use this article
Section 44 fires	❑	❑	❑ .....
General News	❑	❑	❑ .....
Operations Pull out	❑	❑	❑ .....
Training	❑	❑	❑ .....

Please nominate the types of stories, or specific story ideas, you are interested in reading in the Bushfire Bulletin

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Please tick the category that apples to you:

- ❑ RFS staff
- ❑ RFS volunteer
- ❑ Other NSW fire-related agency
- ❑ Interstate fire authority
- ❑ Fire management consultant
- ❑ Development planner
- ❑ Council staff
- ❑ General public

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❑ Direct mail ❑ Local Fire Control Centre ❑ Other .....

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❑ Yes ❑ No

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