Fire & Rescue

Gearing up for the future

Firefighting then and now

Selling the safety message



The Minister Writes



Fire & Rescue NSW does an outstanding job in protecting our community under the most trying of circumstances. The NSW Government recognises this and the importance of continuing to invest in Australia's largest urban fire service to ensure our firefighters have the best possible state-of-the-art equipment, appliances and facilities to perform their vital work effectively and safely.

This is why I announced major funding allocations for FRNSW in this year's State Budget, including:

- \$7.6 million for the replacement of 7,000 structural firefighting helmets with the safer and more advanced 'jet style' helmets, new SCBA face mask fastening system and in-helmet comms
- \$18 million for new or continuing works for building or refurbishing fire stations across NSW including Albion Park, Lambton/New Lambton, Picton, Port Macquarie, Rutherford, Salamander Bay, South Windsor (McGraths Hill) and Wallerawang
- \$12 million for the ongoing replacement of fire appliances
- \$8.2 million for the Head Office relocation in 2013/14 (with a further \$6.7 million in 2014/15), which will lead to a major reduction in office rental.

There have also been some major advancements in our international urban search and rescue and remote hazmat deployment capability with significant ongoing equipment upgrades, and our communications technology is at the forefront of world best practice, with the implementation soon of a new software platform for incident management designed by the US army. This year has also seen the opening of the new \$3.4 million upgrade of the Newcastle Communication Centre.

Of course, community engagement and education continues to become an increasingly important part of the organisation's role and it has been pleasing to see the extensive media coverage across NSW on major community awareness campaigns such as Open Day; 'Change Your Clock, Change Your Smoke Alarm Battery'; a joint public awareness campaign with NSW Fair Trading on the dangers of overheating and using wheat bags as bed warmers; and the Winter Fire Safety Campaign.

I have also been lucky enough to personally visit many fire stations around NSW this year and will continue to visit more in the coming months. I look forward to meeting as many FRNSW staff as possible.

The Hon Michael Gallacher MLC Minister for Police and Emergency Services

The Commissioner Writes

In this issue, while there are several historical articles talking about the early days of our organisation, the main focus is on what we are achieving today and how we are 'gearing up' for the future.

After a long and fruitful period of engagement and consultation with staff and external stakeholders, we recently released our Corporate Plan, detailing our priorities and directions for the next five years. We have also published our Future Outlook, which sets out the challenges we anticipate facing over the next 20 years.

Our recent leadership summit (see article on page 05) was crucial in producing a strategy to ensure we develop tomorrow's leaders. Other articles in this issue outline how we are working to maintain our position, both in Australia and overseas, as a leading fire and rescue service in areas such as hazmat, USAR/rescue and firefighting.

Our extensive community engagement activities include fundraising for the Burns Unit, Westmead Children's Hospital, and other key charities and causes. Dr John Harvey, Head of the Burns Unit, has written an article expressing appreciation for the generous ongoing donations from FRNSW staff and explaining how these funds are being used to great effect.

I am sure this issue will not only ensure you are better informed about some of the exciting and valuable work being done across FRNSW, but also help you to see where we are heading as a leading emergency service.

Greg Mullins AFSM Commissioner

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success



disasters

and rescue efforts rewarded

GEARING UP FOR THE FUTURE

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Intranet

Email any photos and stories to peter.walker@fire.nsw.gov.au

Fire & Rescue News

Send any high-resolution photos (larger than 1,000KB) to: frnews@fire.nsw.gov.au

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The first 2013 class of recruits graduated from the State Training College at Alexandra on 31 May and is now on duty at fire stations across the Greater Sydney Area. A total of 22 firefighters joined FRNSW ranks on 30 May, including former lifeguards, IT specialists, qualified electricians, childcare workers, teachers, an aborist, a Chartered accountant, and former retained firefighters.

"I want to be

challenged

and have more

confidence and

knowledge"

nthony Barrale, formerly an electrician from the Central Coast, described his class as "a great bunch of people from all walks of life with different experiences and all ages too. The oldest is 46 and the youngest 21."

Also among the year's recruits was mother of twins and former lifeguard Rebecca Baxter, who's now on B platoon at Busby. Firefighter Baxter said it was a challenge juggling looking after her young twin daughters while travelling to the college each day for 13 weeks, but it was worth it. "I want to

be challenged and have more confidence and knowledge," she said. She calls herself "a bit of a runner", having done three marathons. Another recruit was former Biggest Loser winner Sam Rouen, on B platoon at Lidcombe. "Becoming a firefighter is something I've wanted to do for a long time, sort of like a childhood dream. You see the big red trucks and you want to do

it," he said. "That dream stuck with me all through school and now I've been lucky enough to become part of that." Firefighter Rouen hasn't been sitting around since he won Biggest Loser; he attained a Certificate 3 and 4 in fitness and qualified as a personal trainer. Last year, Hewan Cook went to four major

bushfires as a retained firefighter. He would have to be one of FRNSW's more experienced recruits: "I've been to MVAs, house fires and factory fires. I joined as a VIEW VIDEO AT fire.nsw.gov.au/frnews OR SCAN CODE TO WATCH NOW

retained firefighter and I just really liked the job."

Gavin Scott, another Central Coast local, was a lifeguard who has competed in triathlons at an elite level in the United States and Europe. "I don't necessarily need to know what I am going to. I like having a variety of possibilities of what could happen in one day, and I like being able to get outside, to be doing things not just sitting behind a desk," he said.

Jessica Sullivan comes to FRNSW having worked for almost a decade as an environmental scientist. "It is an interesting turn of events to come from a water conservation background and then to find yourself in a recruit class on the end of a hose with 115 litres per minute coming out the nozzle," she said. Firefighter Sullivan is an avid rower with dragon boat her preferred sport, having represented both NSW and Australia on a number of occasions.



Mapping FRNSW's

The FRNSW Corporate Plan 2013-2017 and the Future Outlook – Future Directions for Fire & Rescue NSW Towards 2033 were recently released providing a vision and strategic direction for FRNSW that embraces the needs of a rapidly changing economy and society.

comprehensive and lengthy process of consultation was undertaken within FRNSW and with external partners across Government to produce both the Corporate Plan and the Future Outlook. This consultation included focus groups, online discussion forums, interviews with members of external agencies, consultation with staff at a 'futures forum', interactive teleconferences and workshops. The engagement program provided all FRNSW staff and external stakeholders with opportunities to provide input, ensuring the plans encompassed real-world needs and priorities.

"An enormous amount of work, consultation and planning went into the development of the Future Outlook, and out of that the Corporate Plan,' said Commissioner Greg Mullins. "The invaluable staff input into the two Plans is evident in the concise and clear objectives that have been developed."

The Future Outlook will help us to identify what we need to do, and how we should do it, in order to meet the evolving needs of the NSW community. It provides FRNSW with a roadmap for the longer term development of the service. It has been developed through one of the most comprehensive engagement programs that FRNSW has ever embarked on."

The Corporate Plan sets out five Strategic Directions for FRNSW, outlining the focus for the organisation for the next four years and the continued commitment to providing effective emergency management services to the community. It will drive business plans for all Divisions, Directorates and Areas for emergency services and corporate governance. END

Fire & Rescue NSV Fire 5 Rescue NSW

The five	strategic directions for FRNSW are:
	Being an Admired Emergency Service. This will be achieved by continuing to develop and improve capabilities to provide an effective emergency service. Through strong and capable leadership and investing in new and existing partnerships, FRNSW will strive to be recognised for the quality of services it provides.
2	Being a Community Based organisation. By engaging with the NSW community and building strong relationships with key stakeholder groups, FRNSW strives to increase community awareness and safety. Building on an already strong community basis, FRNSW will forge new partnerships to improve understanding of an increasingly diverse community.
3	Employing Leading Practices. Educated choices and investments will lead organisational policies, procedures and work practices to further reduce the social and economic costs of emergencies. Continuation of the 'Be Safe' program and health promotion programs will reduce work related injury, illness and lost time injuries.
4	Composed of Adaptable People. FRNSW will continue to build on a diverse and dynamic workforce with emphasis on developing skills that will improve communication, engagement and respect for all. Frameworks built on leadership accountability, communication and employee satisfaction will be implemented to achieve an adaptable and competent workforce.
5	Having Adaptable Systems. Over the next four years, FRNSW will forge a strong reputation as a change manager. Leadership, communication and change management skills will be taught to ensure process improvements and appropriate systems are in place.
Plan aims to c FRNSW adapt	on both the FRNSW intranet and internet sites, the Corporate lirect the implementation of these strategies to ensure that s as a service to successfully meet any external challenge and nhance the community safety and operational services that it

delivers to the NSW community.



Like many NSW Government agencies, FRNSW has been undergoing significant organisational change over a sustained period of time.

s such, the Executive and Senior Leadership Teams recognised a need to look at our leadership culture and how it could be improved to better lead and manage necessary change.

A Leadership Summit was recently organised at the Australian Institute of Police Management at Manly. It involved two days of intensive workshopping around increasing leadership capability across FRNSW. It proved to be a great opportunity for networking, opening the way for knowledge sharing and collaboration, and helping to improve communication channels throughout the service.

"We held the Summit in recognition of a self-diagnosed need to change our leadership culture to better cope with the huge amount of change we are currently facing. I know that we will see improvements in our leadership capability across FRNSW and an ongoing development program as a result of the Summit," said Commissioner Greg Mullins.

The Summit was facilitated by Dr Ilan Kogus, an experienced consultant in organisational change and leadership. Dr Kogus has worked with clients such as The Body Shop, Ernst & Young, Accor Hotels, Shell Oil and Arnott's. He is a graduate of the Israeli Military Academy and an ex senior officer with the elite infantry Golani Brigade, as well as a veteran of three major wars.

Commissioner Mullins said Dr Kogus was an excellent facilitator. "He ensured we maintained focus on the tasks at hand and shared his substantial knowledge on the issues and challenges facing leaders in organisations undergoing significant change."

Leadership Teams recognised a need to look at our leadership culture and how it could be improved

A highlight of the Summit was a visit from Tony Stuart, Chief Executive Officer of NRMA Motoring and Services. Tony provided a case study detailing how his company overcame resistance to change through strong leadership in moving primarily from motoring services to a group of motoring, travel and lifestyle businesses.

Chief Superintendent Paul McGuiggan, Assistant Director Capability Management, said there were many valuable lessons learned from the Summit. "The themes of the Summit were leading and managing organisational change and creating a performance management culture, two areas for us to work together on as a group. This will ensure that FRNSW remains at the forefront of public safety in Australia," said Chief Supt. McGuiggan. "It was great to spend time with colleagues away from the office in an environment that encouraged critical thinking and analysis of the challenges that lie ahead for us as an organisation."

Other feedback from members of the Senior Leadership Team centred around the importance of the Summit's outcomes.

Chief Superintendent Rick Griffiths AFSM, Area Commander Metropolitan West, said the Summit enabled the Executive and Senior Leadership Teams to clarify their understanding of leadership, the importance of core values and their obligation as senior leaders of FRNSW to consistently model the behaviours of a good leader.

"One outcome I would like to see from the Summit is that the key learnings form the foundation for future leadership development at all levels within FRNSW," said Chief Superintendent Griffiths.

Education and Training Directorate, which coordinated the Summit, has also established an online learning hub on the intranet for the Executive and Senior Leadership Teams, with all resources from the Summit available on the site.

Disaster & USAR equipment upgrade

FRNSW is currently upgrading its disaster and urban search and rescue (USAR) equipment in Sydney, Newcastle and Wollongong.

he upgraded equipment will not only enhance FRNSW's UN-accredited international USAR response capability, but will greatly assist with large scale local incidents and day-to-day technical rescues.

The upgrades include water filtration systems; more reliable communications systems using state-of-the-art technology; new rescue equipment such as cordage for vertical rescues; hydraulic cutting equipment and new acoustic and seismic detection gear; a new search and rescue training prop; and major upgrades to the transportable caches.

As FRNSW has a major role to play in consequence management following terrorist incidents, the recent improvements will also assist with both training and response to events that it is hoped will never happen, but nevertheless for which emergency services must be well prepared.



"Now that we are classified by the International Search and Rescue Advisory Group (INSARAG) as a Heavy USAR Task Force, we need to upgrade our equipment to ensure we are able to deploy at any time anywhere in the world if required, yet still have the coverage capacity to attend to any major structural disasters in NSW," said Station Officer Clayton Abel, Team Leader Rescue/USAR.

"Our upgraded transportable cache allows us to be self-sustainable, supporting and accommodating 72 people for a period of 10 days without making any impact on the community we are assisting. With the cache, we can be in the air and on our way very quickly to a major incident internationally within four hours."

NSW USAR teams are led by and predominately comprised of FRNSW personnel. They include representatives from a range of agencies including the NSW Police Force, NSW SES, Ambulance Service of NSW, NSW Health, Department of Commerce (engineers), AusAid and Emergency Management Australia.

The new equipment is being progressively installed and should be fully operational before the end of 2013.

This upgrade follows the restructure of Operational Capability. This restructure has seen the introduction of full-time firefighters attached to the Rescue/ USAR section, and the return of response capability of USAR 1 on a 24/7 basis.







The equipment upgrades to the inventories of USAR 1, USAR 2 and USAR 3 include:

Low pressure hydraulic chainsaw, ring saw, cut-off saw and core drills Entry link camera Arizona Vortex edge management PetroGen metal cutter Cordless and carpenters tools Confined space air sets New area lighting New stretchers (SKED and Resq-mate).

Hurstville D Platoon has literally made a clean sweep of the 2013 Capital Rescue Challenge held in Canberra in June.

urstville won the overall championship, Best Technical Team, Best Medical Team and team leader Station Officer Clayton Allison was named Best Team Leader.

The Hurstville team led by SO Allison, which included Alan Rourke, Steven McDonnell, Tony Waller (City of Sydney), Matt Lynch and Letitia Harris (Wollongong), competed against rescue teams from across Australia, New Zealand, Singapore and Hong Kong to take out the top title which means they will be eligible to represent Australasia and FRNSW at the World Championships in Scotland next year. Hurstville placed second overall in last year's challenge held in Tasmania, narrowly beaten by Queensland Fire & Rescue Service's Cairns team who will be the Australasian representatives at this year's World Rescue Challenge being held in Clearwater, Florida, USA in November.

"It is great to be able to represent FRNSW at events at this level. We take away a lot of learnings and techniques from each Challenge, and to win the overall title this year has been fantastic," said SO Allison. "It was also great to have the opportunity to work on new car

"We take away a lot of learnings and techniques from each Challenge"

technology, thanks to the 60 cars donated by Holden for us to test our road rescue skills on."

Yass firefighters also competed at the event, their first time ever competing in a challenge, but were unfortunately unplaced due to some unforeseen circumstances forcing them to change team members at the eleventh hour and withdraw from one of the events.

Twenty rescue teams representing fire services, SES, and Mines Rescue competed in the challenge which saw them participate in realistic scenarios to rescue 'victims' while being judged by assessors from the Australasian Road Rescue Organisation (ARRO), one of whom was FRNSW's Inspector Tim Fox.

The prestigious Australasian event is held annually, coordinated by ARRO and hosted each year by a different service, this year by the ACT Fire & Rescue Service. The event aims to reduce the number of road deaths by lifting the skill levels of firefighters and other rescue workers. It was last held in Sydney in 2009 when the NSWFB Nowra team placed second overall, with SO Allison as their coach.

The three-day challenge event, held at the Event Park in Canberra included events such as entrapped rescue, controlled rescue, immediate rescue and a trauma challenge. **END** GEARING UP FOR THE FUTURE

FRNSW hazmat remote capability enhanced





RNSW is enhancing its deployable hazmat capability in remote areas by upgrading its USAR and hazmat transportable cache. For example, the ability to be self-sustaining allowed a hazmat team to set up a base of operations in the State's largest remote area clandestine drug lab cleanup operation in January this year. FRNSW's Hazmat Advisory Response Team (HART) played an integral role in helping Police to maintain safety during this operation near the Blue Mountains.

Superintendent Paul Bailey, Manager Hazmat Capability, and two of his team members, Senior Firefighters Andrew Johnson and David Wilson, and a police officer, were winched by Fire Air 1 into the remote location in dense Blue Mountains bushland 60 kilometres west of Camden. Their role was to investigate and assess the hazmat risk and secure the scene, to allow firefighters to come in and battle a blaze which burnt through 50 hectares of bushland before it could be contained. The lab's owners deliberately set evidence alight on the morning of the planned police operation, resulting in a large bushfire.

"There was a danger of contamination from the smoke and leaking chemicals, as well as a possibility of booby traps on scene, which is why we also had a police officer working with us on the initial reconnaissance," said Superintendent Bailey.

"Our transportable hazmat cache, coupled with the existing USAR sustainability cache, allowed us to set up a base of operations that could provide hazmat support to the police operations for up to 10 days. This operation saw us house and support 60 specialists from FRNSW, NSW Police Force (including chemical operations, forensic and logistics police), security guards, Ambulance Service of NSW (ASNSW) personnel and National Parks and Wildlife Services (NPWS) officers, for a period of five days."

"Logistically this was the biggest clan drug lab operation in which we've ever been involved. Planning around it was long and difficult, but the unexpected fire made the operation much more complex as we needed to liaise closely with the NPWS and the NSW RFS who were managing the bushfire while preserving as much evidence for the Police as possible. Our heavy hazmat crew from St Mary's was also flown in each day at first light and out at last light to provide the personnel we needed to manage the event safely. It was an enormous operation, but in the end a very successful one."

FRNSW remote hazmat capability has also been enhanced with the purchase of a search camera which allows live video streaming to FireCam from anywhere in the world.

"This can be used in situations like this clan lab or hazmat incidents on moving ships at sea where we can remotely identify substances using the search camera, giving real-time intelligence back to base, and even sharing images with chemical companies to help in identifying substances quickly," said Supt. Bailey.

"One exciting avenue of expansion is FRNSW's involvement with the Australian Maritime Safety Authority (AMSA) in managing events at sea under the Hazardous and Noxious Substances International Protocol. This arrangement will see FRNSW work with AMSA and the major shipping companies to effectively manage incidents on moving ships and triage those incidents to determine their suitability to come to port. It is envisaged that this new arrangement will allow greater flexibility for the shipping companies and result in less risk to the ports and the surrounding infrastructure and population." **END**

New detectors boost hazmat capabilities

FRNSW has purchased an additional three chemical detection systems that use Raman and infrared technology, which will boost existing capabilities to quickly identify solid and liquid chemicals.

The detection systems, at a cost of \$160,000, greatly enhance fire crews' ability to positively identify dangerous substances in the field with more than 10,000 different chemical compounds stored in the system's databases.

The three new systems will be installed at Alexandria, Chester Hill and St Mary's fire stations, adding to the units already deployed at Newcastle Hazmat and the Hazmat Advisory Response Team (HART) who are based at the Disaster Response Training Facility at Ingleburn.

Superintendent Paul Bailey, Manager Hazmat Capability, said the additional detectors will not only significantly boost FRNSW's capability to positively identify dangerous substances, but will also enhance firefighter safety on the incident ground. These detectors allow hazmat operators to analyse unknown chemicals through transparent containers without the need to open these containers which can expose the operators to dangerous fumes.

"It also provides Commanders with an enhanced scientific base for making incident ground decisions, such as whether or not to evacuate people and when it is safe to return," said Superintendent Bailey.

The instruments are based on infrared and Raman spectroscopy, which are techniques frequently used in scientific laboratories to identify chemicals. Analysis can take less than 20 seconds and requires only a very small sample. The detectors are used to identify substances including suspect powders, liquid and solid waste, spilled chemicals and suspected chemical warfare agents. The result is a more rapid resolution of hazardous materials incidents, and the return of affected areas to normal much more quickly.

FRNSW is one of the few fire services to have this technology and it has significantly increased organisational capability to effectively manage hazardous material incidents.





ADASHI is a new comprehensive software platform designed by the United States Army and used widely by fire and emergency services across North America and overseas.

t will soon be introduced to FRNSW – the first fire service in Australia to use it – and will complement other existing incident management systems such as BOSS and ESCAD.

"The ADASHI system will modernise our emergency management and bring FRNSW to the forefront of sophisticated technology used in this area," said Inspector Nick Ferrante, who has been involved in evaluating the ADASHI product.

ADASHI stands for Automated Decision Aid System for Hazardous Incidents. It was originally developed by the US Army's Edgewood Chemical and Biological Research Centre in 1999.

"We have trialled several emergency management applications over a number of years, and have determined the ADASHI system is by far the best. We aim to go live with the new system by October 2013 in a field trial in the Metro West region, using it first for major emergency incident management," said Inspector Ferrante.

Superintendent Kim Reeson, Capability Manager, Firefighting, said, "The field trial will include comprehensive training on the new system for senior officers. The system is very powerful and it is very much a learning curve in how best to use it."

FRNSW established a user group about 12 months ago to extensively trial the ADASHI system, which included Inspector Nick Ferrante, Superintendent Kim Reeson, Chief Superintendent Paul McGuiggan, Superintendent Garry Tye and Superintendent Philip Lindsay.

"We have been actively trialling it at incidents, such as the Villawood tyre factory fire last New Year's Day as well as running some simulated incident trials as well. The value this system can add to our incident management and safety is immense," said Supt. Reeson.

"ADASHI provides a shared Incident Action Plan to all members of the incident management team – with instant access to maps, charts, procedures and guidelines, models and data. Whereas information provided on BOSS is time-delayed and not very detailed, ADASHI provides real-time information and as much detail as you want."

ADASHI aids the development of incident action plans with resource tracking and management, touch-screen multi-view mobile GIS, map annotation, automated visualisation of hazards including hot/warm zones, isolation distances, evacuation areas and real-time weather.

The system allows for hazardous material plume modelling enabling high risk facilities such as schools, hospitals and aged care facilities to be evacuated based upon the plume modelling.

As soon as crews are dispatched to an incident, the Incident Action Plan is initiated and immediately bolstered by critical pre-incident plans including floor plans, site layouts, access



information, and chemical databases.

"The Incident Management Team or Incident Controller can use ADASHI to simplify the tasks of resource management," said Inspector Ferrante. "Just by dragging and drop positioning, they can quickly assign roles within organisational charts and assign locations on incident maps, all shared so that actions across all units can be synchronised."

Taronga Zoo



at Taronga Zoo Firefighters from ME2 led by Zone Commander Superintendent Kel McNamara recently

visited Taronga Zoo and performed their regular gondola training drill.

upt McNamara said, "It's something we try to do every couple of months, sharing it among all platoons".

A number of crews participated, including aerial appliances from 24 Manly and 36 Crows Nest, rescue appliances from 36 Crows Nest and 68 Narrabeen, and local firefighters from 25 Mosman, who visit the site regularly and whose local knowledge was tapped into for this drill.

The idea of the training is to streamline FRNSW's operations, as "the real thing" would be a very difficult and time-consuming rescue. Supt McNamara said, "We are always trying to minimise the amount of time it takes to evacuate people from gondolas because of the extreme heat they may experience, if trapped inside on a summer's day for example. The gondolas are made of fibreglass with no air-conditioning and only small air vents, so it is very important to get the crews up into the cabins and rescuing people as quickly as possible."

Down towards the bottom of the Zoo near the harbour, access to cabins can be made using the aerial appliances. Further up, towards the top of the Zoo vehicle access is more difficult with narrower walking paths and uneven ground, so the only way to access the gondola is by using rope rescue techniques. Crews have to harness up, one firefighter must strap onto the wire and then pull themselves along the wire to the cabin. Once there, they must manually release the door, manoeuvre themselves into position to enter the cabin and then harness up any trapped persons and belay them down, one by one, to a safe area.

SO Glenn Dickson A Platoon 36 Crows Nest said of participating in this drill, "It was great to work with our adjoining stations 24 Manly and 68 Narrabeen. I'm always impressed with the level of cordage expertise that the firefighters display but they were even sharper that day, probably because our particular gondola rescue was over the crocodile enclosure! Out of a total 20 gondolas, 17 are on the cables at any given time and could be carrying up to six persons each. Potentially, a breakdown in the middle of summer with temperatures of up to 40°C could see 102 people of all ages and cultural backgrounds placed in a lifethreatening situation. That's why these rescue practice drills are so important for FRNSW and the Zoo staff."

Supt McNamara said, "We'll be working hard with the Zoo in the coming months and years to refine these operations. Streamlining the time it takes to get people out of a gondola entrapment, particularly in those hot summer months, is going to be absolutely vital to the overall success of the rescue operation."

establishing research partnership







FRNSW's Fire Investigation and Research Unit (FIRU) signed an agreement with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), as part of the 'Build it/Burn it' Fire Research Project. This agreement allows FIRU to use CSIRO's purpose-built facility at North Ryde to conduct fire research.

his agreement also allowed FRNSW to use the North Ryde facility to conduct a live burn scenario for the media during the launch of the Winter Home Fire Safety Campaign on 16 May. This scenario highlighted the potential danger from an unattended heater and also used the actor from FRNSW's television commercials to reinforce the dangers of leaving fire safety to 'Chance'.

FIRU has been carrying out fire research for many years. One example of this was the 'Safer Houses Project', a joint research approach by FIRU and CSIRO undertaken in 2005. This world class research led to a greater understanding of the changes to the residential built environment and the increased danger from flashover in compartment fires due to the changing nature of building contents and structure. In turn, the research supported changes to firefighter training for compartment fires and provided evidence to drive changes to legislation, making it mandatory to have residential smoke alarms.

In late 2011 and in early 2012, FIRU also undertook research which involved reconstructing and burning rooms similar to those impacted by fire at the Quakers Hill Nursing Home in November 2011. Again, this research helped to instigate changes to legislation to make sprinklers mandatory in nursing homes.

The 'Build it/Burn it' research into the Quakers Hill fire achieved multiple benefits and many positive outcomes, one of which was the interaction of the fire engineering community and various government agencies working together to reduce the impact of fire on some of the most vulnerable people in our community. Many important stakeholders were influenced on that day and the research outcomes provided from this particular piece of work will support FRNSW's prevention policy well into the future.

There is an urgent need for quality fire research data to support important policy, safety and firefighting decisions. The signing of the Fire Research Agreement, the continuing restructure of the Community Safety Directorate (including the enhanced flexibility of the new FIRU roster), the success of the post-fire research into the Quakers Hill Nursing Home fire, and the expansion into 'build it/ burn it' research all demonstrate FRNSW 's commitment to fire intelligence-led development and implementation of world class prevention policy.

The key objectives of the 'Build it/Burn it' project are as follows

To undertake planned, local and timely fire research, focusing on testing hypotheses and gathering data and evidence to support fire prevention policies and strategies, community engagement campaigns, fire investigation training and the development of safer compartment firefighting techniques.

To create a body of research knowledge about fire behaviour in various classes of structures, involving various contents and furnishings, while testing the efficacy of various active and passive fire protection systems.

To establish FRNSW as the leading built environment and human behaviour fire research agency in Australia.

To strengthen existing research partnerships with universities, industry peak bodies and other stakeholders.

To provide evidence to support changes to building codes.

To provide high definition film footage for community engagement campaigns.

To provide situational awareness into changing built environment changes that impact on the safety of operational firefighters, to be integrated into FRNSW training.

To provide interactive best practice fire investigation training for FRNSW, other fire services and the NSW Police Force.



Deniliquin foam tests

arlier this year, representatives from FRNSW's Equipment Research and Design Unit (ERD), headed by Inspector Andrew Dadley, descended on the Deniliquin Training Facility with a view to testing firefighting foams in realistic scenarios. They were accompanied by firefighters from Firefighting Operational Training (FFOT), the FRNSW Scientific Officer and the FRNSW Media Broadcast Producer; local retained firefighters were also called in to assist. What transpired was some spectacular testing with impressive results.

Insp. Dadley described the aim of the expedition as "part of an ongoing evaluation process, where we'll be trying to determine the next type(s) of foam to be used across FRNSW." Assistant Director of Operational Logistics, Chief Superintendent Gary Picken commented, "What took place in Deniliquin, the physical testing of foam products, is one part of the rigorous testing process that we typically go through on equipment."

The objective

For some years firefighters have investigated concerns that firefighting foams could have a long term impact on the environment and this field research was an opportunity to consider some foams that are based on a new chemistry. As always, a primary concern is to establish that these new chemistry foams are effective in extinguishing fires and preventing any re-ignition. The Deniliquin testing set out to measure the specific behaviours of a range of foams on a variety of fuel fires and of varying sizes.

Paul Beylerian, FRNSW's Hazmat Scientific Advisor, provided technical calculations during the testing and measured and documented air, water, foam solution and fuel temperatures. For further rigour in recording and possible training applications, each test was captured in real time and from multiple angles using HD video, and a thermal imaging camera was deployed during the scenarios. Through testing like this, FRNSW hopes to develop operationally viable and environmentally sustainable solutions for extinguishing fires using foam."

The testing schedule

The first day of testing concentrated on extinguishing flammable liquid fuels in fuel trays specifically constructed to international standard measurements. To assess how they act and react in the real world, instead of using the test fuels set out in international standards, ERD replaced them with fuels that firefighters are more likely to encounter. A hydrocarbon test was conducted using avgas, which is fairly close to petrol but a little less volatile and hence safer in a test environment. An alcohol test was conducted using ethanol, and, because firefighters are regularly faced with fires in electrical installations, an additional test used transformer oil.

The next days of testing focussed on a sequence of car fires, as a type of fire most commonly encountered by firefighters, testing the foams at lower application rates. The testing employed both water and the current Class A foam for a comparison as well as all of the foams under evaluation.

The final day of testing saw the application of foam to a large-scale fire (around 81 square metres), in which aviation fuel was lit in a bund to demonstrate the capacity of the foams to extinguish a large-scale flammable liquid fire. As Insp. Dadley explains, "The test we did simulated a large fuel spill that you might encounter in an aviation environment, like a plane crash or a road tanker spill alight. The fire was quite intense but the foam extinguished it in a short period of time. It clearly demonstrated that it is capable of performing on real world fuels using the current equipment that we have on fire appliances."

Senior Firefighter Nick Coney 1 Stn City of Sydney, who was involved in writing the specifications for these firefighting foams, observed; "We were really impressed with the foam's ability to extinguish the full-scale fire and surprised by how quickly it performed."

Behind the scenes

A project like this requires a lot of work behind the scenes. The technical part and organising of logistics has been ongoing for 18 months, with sourcing of equipment, fuels and foams and getting it all transported to the site. "It's difficult in the current environment to have live fires anywhere and the FRNSW Training Facility at Deniliguin afforded this unique opportunity" said Insp. Dadley. "Deniliquin Facility Manager Paul Maher was absolutely fabulous both in hosting the group and with his tireless preparation and work on-site to support logistics.'

This was only part of the testing. Once finished at Deniliquin, the product was tested against all FRNSW equipment that it could be used with, including appliances, to ensure it works and is safe before being introduced to firefighters.

A collaborative approach yields good results

This project was a joint project with the RFS who tested Class A foam and FRNSW tested Class B foam. Chief Supt. Gary Picken says, "We've used that approach over a number of projects now, including with firefighting equipment, and it really has delivered very good results over the last few years. We collaborate and use each others' results, which saves time and money, and we get the best results with the appropriate technical experts doing the testing."



MYTHBUSTERS: the facts behind the myth

Did Sydney's early insurance-based fire brigades really let buildings burn simply because they bore the wrong insurance Fire Mark?

here has been a long-standing view among Sydney's firefighting community that this was indeed the case.

Colin Adrian, in his book Fighting Fire: A Century of Service, suggested that:

'It was the practice of the newlyformed Insurance Companies Fire Brigade to attend fires only at those premises with a firemark, signifying they were insured by one of the affiliated companies ... The failure to proceed with the [Fire Brigade] Bill, and the failure of the Insurance Brigade to respond to all fires, prompted the formation of the first organised volunteer brigades.'

But is this really how things were in early Sydney? Is this really why the early volunteer brigades were formed? Let's take a very brief look at the evidence.

What exactly is an insurance Fire Mark?

In London, the early fire insurance offices made it a condition that a property was not covered until their Fire Mark was affixed to the front wall of the building. Later, in order to protect the properties that they had insured, the various offices began to form their own fire brigades; however, these were strictly private brigades. They never operated for the benefit of the general public. The various insurance offices displayed their names prominently on their fire engines which were painted a distinctive colour; and when several brigades were proceeding to a fire, they made quite an attractive picture.

This meant, however, that each company's brigade needed some means by which to identify the buildings that were insured by its parent company. The Fire Mark was a ready-made solution and they quickly took on a new purpose. They became the basis by which a brigade would extinguish a fire or ignore it and go home. It was not uncommon for firemen from one company to arrive and then remain as disinterested spectators, while another brigade extinguished the fire.

In 1833, the situation improved when the London offices co-operated to form one fire brigade to cover the whole city. From that time on, the Fire Mark reverted to its original purpose.

What about Sydney?

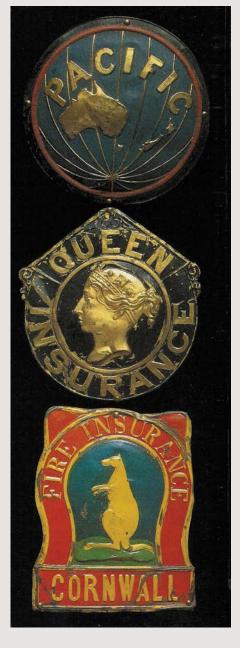
Fire Marks first appeared on Sydney's buildings during 1837; however, they were only ever the equivalent of a trademark. Sydney's earliest insurance office brigades (1830-40s) actually fought over the right to put a fire out and our first Building Act offered a reward of thirty shillings to the first brigade to get water onto a fire.

In later years, the Insurance Companies Fire Brigade (1850-1883) followed a policy of extinguishing all fires, regardless of the building's insurance status. There are many early newspaper accounts that clearly demonstrate that the Insurance Brigade attended and extinguished fires at both insured and uninsured premises alike, as well as premises insured by noncontributing insurance companies. For example, in January 1852, the Insurance Brigade responded to a fire in the Hughes buildings, in Pitt Street. The Empire reported:

'The Corporation Engine and the Insurance Company's engine hastened to the spot. The roof was on fire in several places, but the firemen belonging to the Insurance brigade ascended the roof, and the fire was eventually extinguished ... The premises are uninsured.'

In 1881, a representative of the **Associated Insurance Companies** complained in the Sydney Morning Herald that only one quarter of Sydney's insurance companies were contributing to the cost of maintaining the Insurance Brigade's plant which 'rendered service to insured and uninsured alike'. Six years later, Charles Bown, the Superintendent of the Insurance Brigade, wrote to the Editor of the Sydney Morning Herald complaining that, over the previous 12 months, the Insurance Brigade had attended no less than 64 premises that were insured by the non-contributing companies, and 'not one penny or acknowledgment of any kind whatever [had] been received'.

So then, if the Insurance Brigade did extinguish all fires, just what was it that prompted the formation of Sydney's first volunteer fire brigades? Well ... that's another story! **END**



MYTH BUSTED!

Letting properties burn has never been part of Sydney's fire brigade history.

Story and photos courtesy Museum of Fire staff and research team.

F3 Freeway at Calga



Speeding car

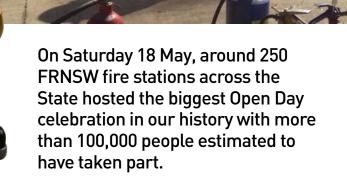
FRNSW received reports of an MVA with people trapped on the F3 Freeway at Calga.

car had rolled at high speed on the Freeway and collided with a two-tonne concrete median barrier, pushing it over a rock wall embankment, as well as then hitting and dislodging two concrete mounted steel support poles. The car ended upside down within a culvert at the base of the embankment 4m below the road surface, trapping two elderly persons.

Pumper 341 (Kariong) and Heavy Rescue 304 (Gosford) were responded. FRNSW firefighters and ambulance paramedics worked together to carry out a difficult extrication and removal of the two critically injured passengers. They were assisted on scene by Police, NSW RFS and Roads and Maritime Services personnel. Conditions at the crash scene were very challenging, with poor visibility, uneven ground, and slippery and wet conditions due to heavy rain. The vehicle lay on its roof and was embedded in heavy undergrowth and crash debris, significantly hindering rescue efforts. The presence of one of the firefighters (Rob Stephenson) who climbed inside the car proved a great help in reassuring the injured passengers during the incident. A full account of the rescue can be found on the Intranet (see story by Kernin Lambert posted 24 April in News Listing).

Once again, this incident demonstrated the excellent relationship between emergency services at serious motor vehicle accidents where people are trapped and/or critically injured.

success



with the locals, as were the sausages with nine kilos consumed in just a few hours.

VIEW VIDEO AT

<mark>SCAN CODE</mark> TO WATCH NOW

fire.nsw.gov.au/frnews

Corrimal on the South Coast reported more than 300 people turning up for Open Day celebrations, while on the North Coast at Evans Head, visitors were treated to some excitement when firefighters had to pack up and race off to a suspicious fire in the bush just north of the Evans Head Surf Club.

At Queanbeyan more than 500 people visited the Fire Station where they were treated to a vehicle rescue demonstration.

The feedback from the public has been overwhelmingly positive with many messages posted on Facebook and comments included in the public survey (see breakout box). Media coverage was also widespread with more than 150 news articles printed from metro, suburban and regional newspapers as well as extensive radio coverage and some regional TV stories.

"Well done and thank you to everyone involved on a fantastic community safety and engagement event, our biggest and most successful ever," Commissioner Mullins said.

ire stations across NSW opened their doors to the public with a range of activities on display including rescue and extinguisher demonstrations, kitchen fat fire simulators, and heritage fire truck displays. Bernie Cinders even featured at a number of locations.

Commissioner Mullins visited Narrabeen and Dee Why Fire Stations where crews were on hand to provide fire safety talks to more than 300 local residents.

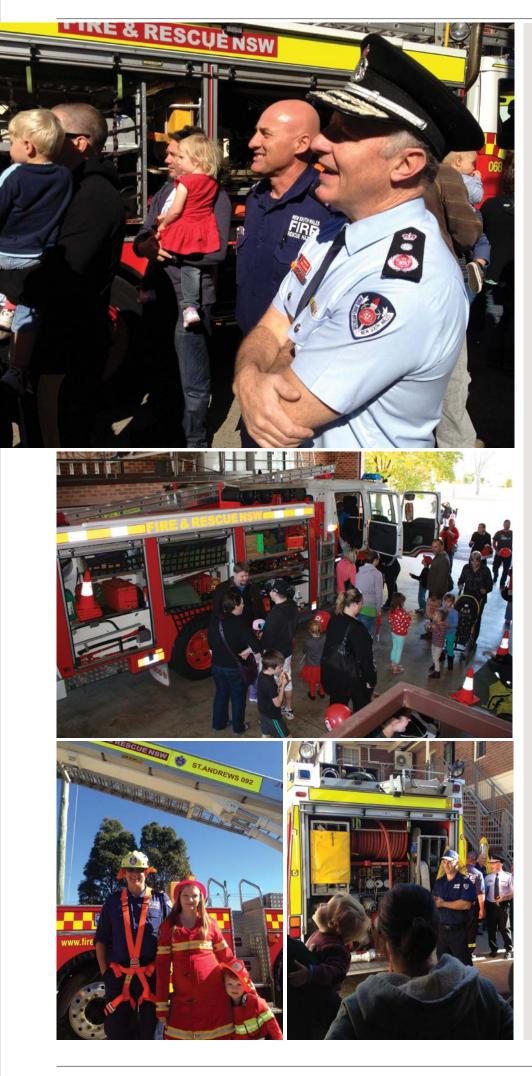
"It's a great opportunity to engage with local communities and reinforce our key messages about our Winter Fire Safety Campaign. It's also a fantastic opportunity for the local community to visit their local fire station, meet the firefighters and see first hand the important diverse roles firefighters play in the community," said Commissioner Mullins.

At St Andrews in Sydney's southwest, more than 1,000 visitors were treated to rescue and fire extinguisher demonstrations, a display from the Hazmat Advisory Response Team (HART) and appliance displays with Tanker 88 and Ladder Platform 92 showing the crowd some of our specialised capabilities throughout the day. Country duo Matthew McNeilly and Amelia Richards also provided live music for what was an exceptional day.

Crows Nest Fire Station staged a car accident rescue and kitchen fire to the delight of its hundreds of visitors. Northern Sydney stations used Open Day to raise money for the children's hospice Bear Cottage at Manly.

At Randwick in Sydney's east, the queue of strollers and Mums and Dads reached way down the street before the doors even opened at 10am with 200 sausages and showbags running out the door with their happy owners within the first hour.

At Bathurst in the State's Central West, more than 150 people came through the station's doors to get an up close glimpse of the appliances, firefighting gear and equipment. They were also treated to a simulated kitchen fire and young and old alike took turns on the fire hose. Nearby Orange Fire Station attracted more than 400 visitors with their thermal imaging camera proving a big hit



Feedback from visitors

Danni Short Thanks Tarro! Such a fun day! ... a bunch of friendly guys, so grateful for what they do for us!

Pete Goulder Great work Kempsey 345 I believe everyone had a great time thank FRNSW.

Juliet Ranieri Thanks Castle Hill Station, even though Open Day was slightly interrupted by an emergency call out; it was most exciting seeing the fire engine leave with lights and siren on!!

Elisabeth Cunningham Well done Glenbrook Fire Station!! Great demonstrations, sausage sizzle and the firemen were all very friendly. Thanks for a great couple of hours!! My kids loved it.

Kia Liao-Mackun Thank you City of Sydney. You made 2 little boys very very happy. We travelled in from the suburbs just to see the hook and ladder firetruck and they have declared that the City of Sydney is the best. We will be back next year!

Domenica Tindiglia My daughter loved Ashfield fire station thanks to the guys there.

Mellissa Mckee Thanks for a great time at Kariong Fire Station my kids loved it!

Amy Roams The guys of Merrylands were amazing and so good. Would definitely take the kids back and would ask for the cupcakes again.

Glen Rieser Perfect day at Rivo 83 station cheers to everyone who attended.

Gillian Holmes Thank you Fire & Rescue NSW, my 4 year old loved visiting the Camden branch ... he's still talking about it.

Nat Blatchford Great job by the Raymond Terrace station, well done boys.

Jacqui Clayton I just wanted to say a big thank you to the firemen at Berowra Fire Station for a fantastic Open Day on Saturday 18 May. My kids loved the fire truck and all the demonstrations. It is days like this you are reminded of how valuable the fire station is to the community.

Tanya King Just wanted to pass on a note of thanks to the fireman Tim and team down at the Avalon fire station for making our son Charlie's year at the recent Open Day. You guys do such a great service for the community!

2013 WINTER FIRE SAFETY COMMUNITY EDUCATION CAMPAIGN

his year's Winter Fire Safety Campaign was launched by the NSW Minister for Police and Emergency Services Michael Gallacher, FRNSW Commissioner Greg Mullins and NSW Rural Fire Service Deputy Commissioner Rob Rogers at the CSIRO Facility at Macquarie Park on 16 May.

The launch, which attracted a throng of media, focused on 'Chance' – the character featured in the television advertisements who encouraged home owners to 'leave it to chance' – causing fires through complacency. The launch featured an actual burn using the CSIRO research burns unit, with 'Chance' causing a fire by leaving clothing on a radiator heater. The call to action for the public this year is to do the GIO-sponsored online Home Fire Safety Audit at <u>www.homefiresafetyaudit.com.au</u>. In the first few weeks of the campaign being launched, website traffic showed a big spike in the number of people going online to complete the audit.

"This shows that the campaign is working, our fire safety messages are getting out there and people are turning them into actions. We all know how important community education is in fire prevention, so well done to everyone involved in developing and delivering the campaign," said Commissioner Mullins.

"Every day firefighters attend home fires that could have been prevented with a few simple steps and precautions, so this campaign, due to the high number of house fires in winter, is really important to protect members of the community and keep them safe."

Between May and September 2012 there were 2,028 house fires in NSW with 313 fire injuries and 11 preventable fire deaths.

According to FRNSW research, only 10% of householders in NSW have a home fire escape plan which they have practised. "It's important that firefighters spread the word – 'Don't leave you and your family's fire safety to chance this winter' – and this message will be backed up by the television advertisements which will run through to September. Let's work together to make our community more fire safety aware," said Commissioner Mullins.

'Reverse competition' video a social media hit

In the lead up to the 2013 Winter Fire Safety Campaign, FRNSW developed and posted a 'reverse competition' video on Youtube and Facebook in May, informing people that they could win a house fire just by doing nothing! To 'unenter' the competition, they were encouraged to do an online home fire safety audit.

The video reached more than half a million Facebook users within the first few weeks resulting in almost 35,000 views on YouTube – it also became a big talking point on social media channels. The quirky video, which aimed to make people realise that not being fire aware or fire prepared can have disastrous consequences, attracted over 70 comments. Most comments were supportive although some were critical or queried the approach.

"I think the negative comments were definitely balanced out by all the really positive comments, and the fact it attracted so many views and nearly 2,000 likes on Facebook, as well as became a hot social media topic, means it was successful in getting people to think about home fire safety," said Aiden Frost, Marketing and Sponsorship Manager, Community Engagement & Development Unit.



SOME OF THE FEEDBACK ON FACEBOOK:

HANCE

Kenneth Donaldson:

Everything that is good is worth the cost no matter if the viewers are small or large for even one life saved far outweighs the cost of fools who think money is more important. Thank you Fire and Rescue for doing your part in saving lives.

Louise Krout:

Love the ad, great way to get people's attention. I just want to say to all who fight fires, you are a credit to our society, you risk your lives to help protect others – you guys rock!

Chad Parker:

So many people are still complacent about fire safety in the home, without realising the. potential for a fire at any point... As the video points out, there will be 1,200 house fires in NSW this winter. Firefighters don't like going to house fires, but when they do they would love to know that the people involved are alive and safe before they arrive, which is what this is all about.

Chris Hulsman:

Great message in this, but not sure the use of a joke/humor is the best method. Still worth sharing to get the message out.

Northern NSW





Ultralight crashes, killing pilot

n Sunday 24 March at 0852 hours, 362 Lismore and 316 Goonellabah were called to reports of an ultralight aircraft crash at Lismore regional airport. The single-engine aircraft, with an experienced pilot on board, was on its maiden flight when it suddenly

crashed after take-off, killing the pilot instantly. 362 Lismore crew arrived quickly on scene and extinguished the burning wreckage with two 38mm foam lines. The cause of this incident is under investigation. **END**



"If firefighters don't switch on to electrical hazards, there will be a firefighter fatality." S0 Luke Unsworth, Operational Safety Coordinator.

lectrical hazards, in one form or another, exist at most incidents we attend. Many sources are familiar – domestic, commercial or industrial light or power circuits; street fixtures such as street lighting or illuminated signs; and electricity distribution assets such as powerlines and transformers. Others are less familiar, and often less well regulated, such as alternative power systems including photovoltaic solar, wind and cogeneration, and hybrid vehicles.

"If firefighters don't switch on to electrical hazards, there will be a firefighter fatality," said SO Luke Unsworth, Operational Safety Coordinator. "History has shown that near misses and minor injuries are a warning that unless things change, a fatality will occur."

As can be seen from the following list, FRNSW has had too many adverse interactions with electricity to ignore the risk that it poses.

Recent incidents involving electrical hazards

June 2010: A firefighter received an electric shock at a house fire when power was not turned off before firefighters entered the building.

February 2011: A firefighter received an electric shock at a house fire after touching a metal gate on the property. Power had been turned off at the switchboard, however the insulation on the consumer mains wiring was burnt away by the fire, electrifying metal building materials including the gate.

March 2011: A firefighter received an electric shock at a sprinkler system activation after touching an electrified metal meter box.

June 2011: A firefighter received an electric shock at a shop fire during the overhaul phase when metal being removed came into contact with the consumer mains. Power had been turned off at the switchboard.

August 2011: A firefighter received an electric shock at a house fire while removing metal roof flashing. Power had been turned off at the switchboard, however the consumer mains had electrified the metal.

March 2012: Five firefighters received electric shocks at a house fire while trying to locate a fire in the roof space. Power had been turned off at the switchboard.

June 2012: A firefighter received an electric shock at a building fire from a neon lighting circuit. Power had been initially turned off, but was turned back on to assist with determining the cause of the fire.

March 2013: A firefighter received an electric shock when the carbon dioxide extinguisher that was being used came into contact with the energised electrical equipment.

April 2013: Firefighters at two separate incidents moved energised powerlines that had come down.





What we have done to date

These electrical incidents reinforced the need for changes to how electrical hazards were dealt with. FRNSW worked closely with the three NSW electricity companies - Ausgrid, Essential Energy and Endeavor Energy – to develop a holistic approach to the management of electrical hazards. Following that collaboration, in late 2011 six new Standard Operational Guidelines (SOGs) were published covering Isolating power at Incidents, Wires down incidents, Working near power lines, Substations, Poles, Kiosks, Pillar boxes and street fixtures and Alternative power sources. Publishing of these new SOGs allowed 30 other FRNSW policies/procedures/ documents to be rescinded, significantly simplifying the job of managing electrical incidents. A Station Training Program module and reference manual (the guideline support document) were also published.

FRNSW's eLearning capability has provided an opportunity to further improve the learning process. Two modules, Electricity basics and Isolating power were made available in 2012, with most firefighters completing them by the end of 2012.

Three other modules have just been/will be released, Power Lines, Street-Level Fixtures and Solar Power, completing the suite of electrical hazards awareness training in the eLearning environment. This will allow firefighters to benefit from multimedia and interactive elements while undertaking the training at their own pace.

"All firefighters are urged to not only undertake the electrical hazards awareness modules, but to discuss the topics with other firefighters and to work as a team at incidents to identify all potential electrical hazards," said SO Unsworth. "They should also carefully consider whether the benefits of undertaking work around an uncontrolled electrical hazard is worth the risk."

Quick facts about electricity

- Electricity in NSW is distributed on 300,000km of cable – enough to wrap around the Earth more than 23 times.
- There are 2.3 million power poles in NSW.
- Approximately 11% of all available residential dwellings in Australia have some form of solar power installed.
- Mobile phone network antennae have a backup electricity supply so an electrical and radiation hazard still exists even when power is turned off to the site.
- On average there are 20 deaths each year in Australia due to unintentional electrocution, with more than half these deaths occurring while engaged in paid work. The most common energised objects involved included overhead power lines (22.1%), electrical appliances (16.6%) and direct contact with electrical wires (11.6%).
- It is the current that injures or kills, and the voltage that pushes the current through the body. In certain circumstances, currents as low as 10 mA can cause death. Average residential distribution systems can carry up to 400,000 times this current. A domestic kettle draws approximately 1,000 times the current that can cause death.
- Substations and switchyards have a wide variety of hazards that need to be considered during firefighting. These include high and low voltage power sources; large volumes of oil (some containing polychlorinated biphenyls), compressed gases (such as air, nitrogen, carbon dioxide and sulphur hexafluoride), hydrogen and diluted sulphuric acid from battery rooms, PVC-insulated cables (which give off chlorine gas when burning) and buildings containing asbestos.

Street-level fixtures supplied with electricity are very common in NSW, particularly in urban areas. They include speed and safety cameras, bus stop lighting fixtures and over 3,700 sets of traffic lights across NSW.

STAYING SAFE ON THE JOB



CYBER SECURITY AND YOU

Why it matters and what you should do to protect yourself and FRNSW

ecently National Cyber Security Awareness Week put the spotlight on the importance of reminding people to 'stay smart online'. This is particularly relevant for all FRNSW employees who have access to sensitive information.

FRNSW Information Security Manager, Asaf Ahmad, said unscrupulous hackers often gain access to sensitive corporate information by breaking into home user accounts which do not have the same level of protection from high level antivirus software and security devices as they do at work. "When working remotely from home computers, it is really important to ensure you have downloaded up-to-date antivirus software on your computer as well as set up your own user account rather than using the admin account," Mr Ahmad said.

"Cyber threat is becoming more and more prevalent as we all increasingly live our personal and work lives online, so being vigilant about your security is really important, not only for your own personal safety, but for FRNSW."

Stay smart online

The Government's Stay Smart Online website offers the following tips to help you improve your online security:

Use strong passwords and different passwords for different uses

Stop and think before you click on links and attachments

Take care when buying online – research the supplier and use a safe payment method

Only download apps from reputable publishers

Regularly check your privacy settings on social networking sites

Stop and think before you post photos or financial information online.

If you are concerned about being bullied or threatened online, contact Workplace Standards Branch.



24

For more information and tips on cyber security, visit www.staysmartonline.gov.au

Chopper crash kills four



Tragedy in the air

Sadly, late March saw the tragic deaths of five people in two unrelated aviation incidents.

he first tragedy occurred just after midday on 21 March in the grounds of the well-known Panorama House function centre at Bulli Tops. A privately-chartered four-seat Robinson R44 helicopter was attempting to land next to the venue, when it reportedly clipped a tree, landed heavily, and burst into flames. Workers at the nearby restaurant raced to the scene with dry powder extinguishers and bravely attempted to rescue the trapped occupants, but were unable to quell the rapidly developing fire.

Fire crews observed large volumes of smoke en route to the incident. Rescue Pumper 241 Bulli was the first arriving appliance, with support provided by crews from 461 Thirroul, 269 Corrimal, 503 Wollongong and NSW RFS crews. Police and Ambulance also attended the scene. Responding fire crews used foam to extinguish the fire with one line of 38mm

hose, however the main structure of the helicopter was burnt out and tragically the four people on board the helicopter died.

A crime scene and exclusion zone was established at the crash scene, and risks around fuel and aircraft materials were assessed and adequate control measures including PPC were put in place. Police and FRNSW visually screened the crash site and firefighters monitored the wreckage by thermal imaging camera.

At the conclusion of the incident, FRNSW conducted a hot debrief on site and ensured ongoing critical incident support program assistance for attending personnel. The cause of the accident was investigated by police and aviation investigators.

Superintendent Steven Baker commended the Panorama House staff and all firefighting personnel for their bravery. "I think it's a very brave action that they have put their own lives at risk in an attempt to save others," he said. "It's generally acknowledged that aviation fuel is highly volatile, and subsequent to this and to other similar fatal incidents involving the same type of aircraft, an investigation was recently launched by the Channel 9 'Sixty Minutes' program in consultation with international aviation experts. As a result, the Civil Aviation Safety Authority (CASA) has recently issued an industry-wide safety directive to ensure replacement of all rigid fuel tanks on Robinson R44 helicopters, with a flexible 'bladder' type tank. This action has been taken to ensure greater resistance to crash impact, and to reduce the risk of ensuing fire due to fuel tank rupture." END

New Communication Centre unveiled at Newcastle

The long-awaited Newcastle Communication Centre was officially unveiled at a ceremony earlier this year.



he Minister for Police and Emergency Services Michael Gallacher and Commissioner Greg Mullins officially unveiled the \$3.4 million upgrade on 19 April 2013.

The opening marked the start of a new era for FRNSW's communication centres. Last year, following the introduction of a new state-of-the-art computeraided dispatch system, the number of communication centres was reduced from four to two. The new dispatch system has contributed to better coordinated and enhanced emergency response operations across the State.

The new dispatch system also led to the expansion and upgrade of the old Newcastle Fire Station to house the new Newcastle Communication Centre. This upgrade included a new operator room with 12 purpose-built consoles, a training room, a major incident coordination centre, new IT and communications equipment storage, and new staff facilities including toilet facilities, kitchen and locker rooms. There is also an uninterrupted power supply that ensures operators can provide their vital call-taking and dispatch responsibilities around the clock.

At the opening in April, Commissioner Mullins used the opportunity to praise the dedicated team of professional operators and to thank them for their patience while the upgrade took place. "It's been 12 months since we streamlined our communication centres and introduced our new CAD," he said. "This cuttingedge technology has enabled bettercoordinated enhanced operations, with incident-specific hazard and risk information available to operators at the time of dispatch."

"The system has seen us move from a 'silo' approach of having four separate partitioned communications centres to a single 'virtual' operating environment servicing all of the State from Newcastle and Alexandria."



he 20 members of the Emergency Services Computer Aided Dispatch (ESCAD) project team were recognised with a Unit Commendation for Meritorious Service at the end of May. The team was praised for their efforts in implementing the new state-of-the-art virtual call-taking environment and the successful transition from four to two communication centres. Their efforts were critical in making the new dispatch system a reality.

Commendation for

MAJOR UPGRADE FOR BANKSTOWN FIRE STATION

n Friday 24 May Commissioner Greg Mullins joined Police and Emergency Services Minister, Michael Gallacher in officially opening the new \$1.4 million major upgrade of Bankstown Fire Station.

"It was my pleasure to attend the opening to celebrate yet another major investment in our firefighting resources," said Commissioner Mullins.

The major upgrade of Bankstown fire station, built in 1975, has brought it up to modern standards and provided a bigger and better base for the 24 firefighters who protect Bankstown and surrounding communities from fires, accidents, chemical spills and other emergencies. Upgrades include: a new training room which will also be used as a local bushfire control command centre during summer, a new fitness room, watchroom, new toilets, showers, lockers and storage.

In 2011/12 firefighters at Bankstown Fire Station responded to 2114 fire and emergency incidents, including 369 fires, and undertook 541 community safety education and engagement activities.





Firefighting efforts in Newcastle bear fruit

🗒 APR 📴

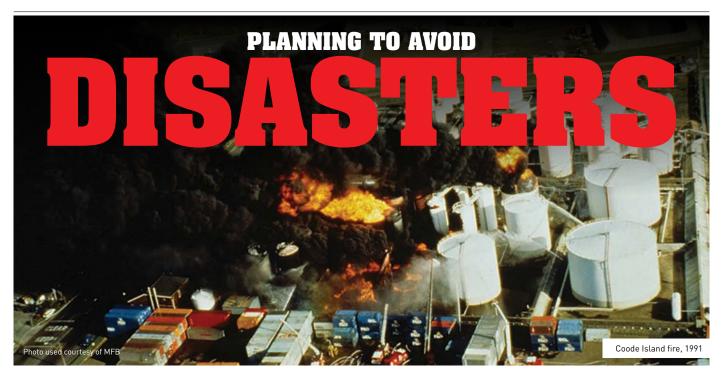
Just before midday on Monday 1 April FRNSW crews responded to a fire involving an office and part of a cold store within a Newcastle fruit market on the Pacific Highway at Bennetts Green.

n arrival, large volumes of smoke were issuing as fire conditions intensified. Crews carried out an aggressive internal attack, cutting the fire off on all sides and saving most of the structure.

Pumpers 500 (Tingara Heights) and 255 (Charlestown), Rescue Pumper 222 (Belmont), Tankers 500, 255 and 222, Heavy Rescue 260 (Newcastle), Ladder Platform 260, Duty Commander MN1 and Senior Instructor Metropolitan North attended the blaze with firefighters attacking the seat of the fire downstairs while also carrying out search and rescue operations upstairs where residential units were located. Firefighters were successful in containing fire to the office area and a section of the cold store, preventing fire spread to the retail section, barbers shop and residential units on level

one. All mobile home units were successfully protected.

Ambulance Service of NSW, NSW Police Force, electricity authority and gas authority personnel also attended the incident. A full account of the fire can be found on the Intranet (see story by Kernin Lambert posted 7 June in News Listing).



he world watched in horror when a Texas fertiliser plant caught fire and exploded on 17 April 2013. The devastating explosion left 14 people dead, including 11 firefighters, and injured about 200 people. The blast caused an estimated \$100 million in damages to homes, businesses and schools (Source: Texas Homeland Security House Committee Hearing on 1 May. Special reports part 1 & 2).

The actual cause of the fire and subsequent blast at the West Fertiliser Company facility is still being determined. Investigators know the initial fire started in the fertiliser and seed building, but do not know how. They have ruled out the water used during firefighting operations as the cause of the explosion and a number of other factors.

In the aftermath of the disaster, questions were raised about how ammonium nitrate is stored at facilities here in Australia. In particular, residents around the ammonium nitrate storage facility in Newcastle aired their concerns.

The reality is that NSW has among the most stringent planning and safety rules in the world governing the storage, transport and use of ammonium nitrate, and the location and design of facilities which manufacture and store it and other hazardous materials.

The Workplace Health and Safety Regulation 2011 regulates operators of Major Hazard Facilities or sites where large quantities of hazardous materials including Schedule 15 chemicals are stored. Under this Regulation, the operators must have various plans and processes in place to eliminate or reduce the impact of possible incidents involving these materials. **Enter Station Officer Stuart Harvey.**



SO Harvey is part of a multi-agency team that manages registration and future licensing of these facilities. Together with representatives of the NSW Police Force, WorkCover Authority of NSW, NSW Environment Protection Authority and the NSW Department of Planning and Infrastructure, they liaise with and assist facilities to help them avoid the sort of disaster that occurred in Texas.

"We're working with operators of facilities such as oil refineries, chemical processing plants, large chemical and gas storage depots, and large chemical warehouses," said SO Harvey. "If they're storing large quantities of a hazardous material, then they have to notify us and work with us to meet a range of requirements. For example, if they're storing more than the Major Hazards Facility threshold for petrol of 50,000 tonnes, then they have to notify us and go through the steps towards obtaining registration and, ultimately, a licence."

"This includes identifying the potential incidents that could occur, conducting a safety assessment that considers the likelihood and impact of such incidents, and taking steps to eliminate or minimise the chances of these incidents occurring."

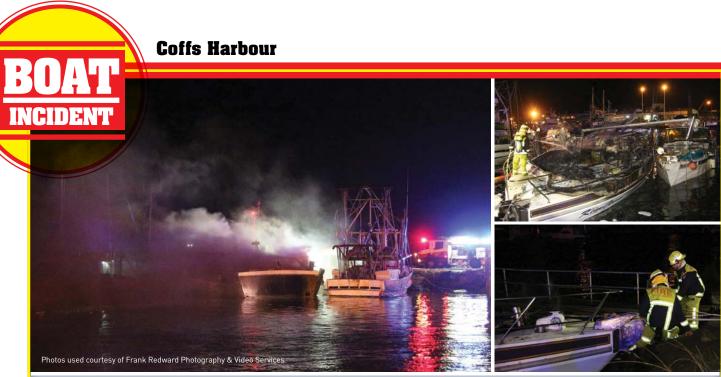
SO Harvey evaluates the safety assessment, controls and risk management plans that determine how

Required actions for operators of Major Hazard Facilities
Identify all major incidents that could occur
Identify major incident hazards
Conduct a safety assessment
Implement control measures to eliminate or minimise the risk of major incidents
Establish and implement a safety management system
Prepare and test the emergency plan
Prepare, submit and review a safety case
Review the risk management.

operators will avoid an incident, but also how an operator intends to manage any incident should it occur. He said the system was being used throughout Australia although it differed slightly from state to state.

"After several incidents including the 1998 Esso Longford explosion, it was decided to create an extra layer of control over these sites," said SO Harvey.

There are approximately 40 Major Hazard Facilities in NSW and a number were approaching the licensing stage. "The aim is to reduce the likelihood and impact of any chemical escape, spillage or leakage; or implosion, explosion or fire," said SO Harvey. "This will ultimately protect lives and property from any major accident. What is most encouraging is that we are seeing positive changes in the culture towards public safety from these operators."



Midnight blaze at Coffs Marina

Just after midnight on Friday 3 May, firefighters from 257 Coffs Harbour, 441 Sawtell, 507 Woolgoolga and 476 Urunga responded to a boat fire at Fisherman's Wharf at the Coffs Harbour marina.

n arrival, firefighters found a longliner fishing boat engulfed in fire, with the fire also threatening to impact other boats in the marina. Fire crews initially commenced attacking the fire from the wharf using hand lines. About 15 minutes after crews arrived on scene, the 35 metre long boat self-started - it is believed this occurred because the fire had burnt through the wires to the starter motor causing it to shortcircuit and activate (a situation that can also occur in car fires). The mooring lines snapped under the power and the burning boat then started to travel around the marina, in the process

damaging other boats, one so seriously that it subsequently sank.

The boat finally came to rest in a different section of the marina, which meant fire crews had to relocate appliances and equipment to fight a fire in a new location. This added an extra dimension to an incident that had already posed significant challenges.

When the boat came to rest, firefighters worked to extinguish the fire using foam. In the meantime, NSW Water Police officers and owners of other boats in the marina moved vessels away from the fire. It took firefighters about two hours to get the fire under control. A ground monitor and hose lines were used to protect adjoining vessels and booms were deployed to ensure that any contaminants from the boats did not enter the harbour. FRNSW crews assisted with the recovery of the boat and continually monitored the environment for any possible oil or fuel spills.

All people were accounted for and no-one was injured in this incident. The cause of the fire is still under investigation. The situation confronting the firefighters at this fire were quite unique, but they highlight the ability of firefighters to deal with unusual and rapidly changing circumstances.



Reducing Control of the second secon

From 1 July 2013, false alarm charges in NSW increased from \$750 to \$1,250.

he purpose of this increase is to reinforce to building owners and managers the impact of false alarms on the community, their businesses and FRNSW's resources; and to provide an incentive to have AFA systems properly maintained and serviced. Previous increases in false alarm charges have reduced the number of false alarms; however, around 35% of all responses are still to false alarms on automatic fire alarm systems.

Automatic fire alarms are a vital first line of defence against fire. They alert fire services, alert occupants giving them time to escape, and limit the amount of fire damage, particularly where buildings have fire sprinklers. However, on most occasions when alarms activated, there is no real emergency. FRNSW responded to 44,698 automatic fire alarm call-outs in 2012 and 98% of these were false alarms.

Alarm Assessment Officers will continue working with building owners and managers to reduce unwanted false alarms and provide advice and strategies to minimise incidents. This has been very effective with many organisations across NSW, dramatically reducing their false alarms and therefore the charges they incur.

Various resources have been produced for firefighters, describing the charges policy and increases for their reference, as well as information to give to building owners and managers at sites where there has been a false alarm incident. These include brochures, fact sheets and other material that explain the need for increased charges, and more importantly, strategies that can be implemented to reduce the number of false fire alarms.

Reasons for increased false alarm charges

False fire alarms lead to complacency, and having appliances turnout for no reason can put the community - and firefighters - at risk. Automatic fire alarms are legally required for certain types of buildings, and they save lives. However false or unwanted fire alarms can mean people get complacent about hearing fire alarms. This is something emergency services take very seriously and are working hard to stop. A range of materials have been developed to help FRNSW educate business and the community about these charges, how important they are and why they are increasing.

Waivers

Sometimes an alarm activates for no apparent reason or because of a mistake. In these cases, people can apply for a waiver. FRNSW offers a number of different types of waivers including one off 'Good Will' waivers. All the waiver options are listed on our Internet website.



Log truck takes a bath

A semi-trailer carrying logs rolled off Forbes River Road, 40kms west of Wauchope.

ort Macquarie Hazmat 424 and boat were deployed to the scene, along with a crew from Wauchope and NSW RFS volunteers from Yarras to contain a minor diesel and oil spill at the scene where the truck came to rest in the shallow river spilling several large logs. Crews used booms to contain the minor spill flowing downriver at Birdwood into the Forbes River. After several hours, the spill was contained in bins and the truck righted and the logs successfully retrieved.

HELPING FIRE VICTIMS



charity bike ride raises \$276,000 for burns patients

ince 2006, the '400 in 4' charity bike ride has raised \$276,000 for the Burns Unit at Westmead. In 2014, they're hoping to break through the \$300,000 mark.

This year the charity ride saw 26 FRNSW firefighters cycle 400kms in just 4 days in April, to raise much-needed funds for the Burns Unit at The Children's Hospital, Westmead.

The driving force behind organisation of this year's event, Hurstville Station Officer Scott Henderson, said the ride was a huge success culminating in a special event at the Burns Unit to hand over a cheque for \$37,598 to Dr John Harvey on 18 June. "It was such an amazing feeling to be able to give generously, and to meet some of the patients. The funds raised will go towards improving their long-term care and treatment for serious burns," said SO Henderson.

The FRNSW team left Wagga Wagga on 1 April for their epic ride for charity. They stopped at Gundagai, Yass and Goulburn, visiting schools and local communities along the way, giving fire safety demonstrations and encouraging householders to ensure they have a working smoke alarm at home.

"I can't thank everyone involved enough for their hard work and enthusiasm in not only promoting fire safety messages, but also in raising funds for burns victims. It's a cause close to the heart of all firefighters."

The four-day journey culminated in a wonderful spectacle with riders being escorted through Sydney streets by fire engines and fellow firefighters on bicycles



before arriving at The Children's Hospital on 5 April.

"It was amazing, we had our Commissioner Greg Mullins join us for the last leg and arrived to cheers from patients, family and friends and hospital staff," said SO Henderson. "After our arrival, we officially opened the new '400 in 4' operating suite, dedicated to our charity bike ride in recognition of the more than \$270,000 raised over the past seven years," SO Henderson said.

"Of course, the ride itself, while challenging physically, was a fantastic experience for all of us involved. The support from every community we visited, from FRNSW as a whole to the general public, as well as the unwavering gratitude from the Burns Unit, made it all more than worthwhile."

When the '400 in 4' crew presented the cheque to Dr Harvey, the handover was reciprocated with a special presentation made to Assistant Commissioner Jim Hamilton AFSM to thank FRNSW for its invaluable support and the event's main sponsor, Mr Steve Trevor, NSW Councillor for the National Fire Industry Association.

The crew were also given a personal tour of the Burns Unit as well as the new burns treatment theatre which the ride has funded.

"That was a really moving experience for all of us. It was made even more poignant when Dr Harvey told us that our fire prevention work in the community is working with the Burns Unit seeing a definite decline in burns involving children in the home," said SO Henderson.







Donations to the Burns Unit

Where does your money go?

By Dr John Harvey, Head of the Burns Unit, The Children's Hospital at Westmead.

he Burns Unit at The Children's Hospital at Westmead (CHW) is the only referral centre in NSW for major burns in children. We receive children with burns from all over the State and also co-manage less severe burns with local health practitioners by means of our digital photographic consultation service "Kidsburns". This allows our staff to assess the history, review a photograph of a child's burn and decide whether they can be managed close to home with ongoing consultation or need to be transferred to CHW.

Members of Fire & Rescue NSW work alongside the CHW Burns Unit and contribute not only financially but also in a very major way to promote burns prevention. In recognition of our close collaboration, we have the honour of having been designated Sydney Fire Station Number 2.

We are also privileged to have members of FRNSW as our major sponsors. It is remarkable that so many staff contribute from their salary and we receive over \$75,000 each year from their generosity. The staff of the Burns Unit aim to provide the very best possible care for children with burns. This requires expenditure on equipment and staff well beyond that possible with our existing funding and is only possible because of donations.

Fire crews in some areas participate in McDonald's' annual McHappy Day. An exclusive arrangement with McDonald's annually raises sufficient funds to provide the Burns Unit with a Burns Anaesthetist. This is a unique position in Australia and allows us to ensure that every child has pain relief for their burns dressings supervised by a specialist in pain management. The appointment also allows us the degree of flexibility needed to manage acute burns in our own theatre outside normal operating theatre sessions. Donations also enable us to employ staff for distraction therapy (important in helping reduce the pain of burns dressings), physiotherapy and for research.

In addition, each year since 2006, a group of firefighters have cycled the 400 kms to Wagga Wagga and back in four days (the '400 in 4' ride). This inspiring event was thought up and begun by Scott Hanley with four riders in 2006. The number of riders has now swelled to 40+ with Commissioner Greg Mullins riding with the group for the last leg in 2013. The aim is to raise awareness of burns and promote burns prevention in primary schools and shopping centres along the way and to raise funds for the Burns Unit. Over \$270,000 has been raised which we used to commission a Burns Operating Theatre at CHW. This was formally opened in February 2013 and named in honour of the '400 in 4' event.

The potential for a disfiguring burns scar is a major issue for children and



The staff of the Burns Unit aim to provide the very best possible care for children with burns. This requires expenditure on equipment and staff well beyond that possible with our existing funding and is only possible because of donations.

their families after recovery from a burn. Scar management is difficult and requires long term management with special pressure suits and splinting. A new and exciting approach using laser therapy has been used with success in the USA. We at CHW are extremely keen to begin a trial this year using laser and we are extremely grateful for another firefighters' fundraising initiative that funds this equipment. We are confident that the use of the laser will significantly improve the management of children with burns scars.

Several other notable firefighter fundraising events need mention. Ted Rance from Katoomba has run a highly successful and enjoyable golf day in the Blue Mountains since 1986 and has raised over \$300,000, a staggering sum, The funds have been used to provide cardiac monitors for the acute burns patients on the ward and into funds to support our additional staff. Also along golfing lines, Philip Lindsay and Karen Richardson kindly donated funds to the Burns Unit from the annual Stephen Richardson Memorial Golf Day. These funds are currently being used to purchase an ultrasound unit for assessing burn scar depth, a critical factor in determining and evaluating treatment.

Our staff have been frequent guests at the fireground in Alexandria to watch FRNSW classes graduate. The graduating firefighters raise money for the charity of their choice and we have been the beneficiaries on many occasions. There are many other firefighters and fire stations that hold functions for us without much fanfare, and a big thank you goes also to them.

I am very pleased to have the opportunity to write an article for Fire & Rescue News mostly to record our thanks to all members of FRNSW for their continuing involvement and support. With your support, I believe that we really can continue to push back the frontiers of burns care for children and secure a happy and productive future for them and their families.

Growing up file station Marie McCarthy members By Gary Boyce, Museum of Fire

The second of th

At Crows Nest Fire Station, an elderly lady sits expectantly. She is the guest of honour at the station's 2006 Centenary Ceremony.

arie McCarthy, now in her early nineties, spent her childhood living in fire stations.

Marie moves over to a small table covered with souvenirs and mementos of the occasion, and admires a small silver pin featuring a fireman's brass helmet with crossed axes. She wants to purchase one, but the event organiser will have none of that. "Please Marie, accept this with our compliments."

She is then taken on a guided tour of the old station by a Crows Nest firefighter, accompanied by the Brigade Historian. As she passes from room to room, the memories come flooding back. She enters an upstairs room and hesitates: "This was the laundry drying room - it doubled as my bedroom. I used



to sit here beneath rows of clotheslines and pulleys and plait my sister's hair, or read a story before lights out."

Today, with 10/14 rosters and travelling to the workplace, Marie's world is fast becoming a forgotten era. But when you look at the layout of fire stations like Crows Nest, City of Sydney, Pyrmont and Darlinghurst, you are reminded that they were built to accommodate communities of firemen and their families, all living together under one roof. Station yards and quarters were full of children; firemen's wives assembled and chatted in the communal laundries and around the clotheslines. The man of the house was on duty twenty four hours a day, for seven consecutive days. A fullnight's sleep? For a fireman's family that was a luxury. Marie recalled, "My father was married in 1913

Story and photos courtesy Museum of Fire staff and research team.

and he was granted living quarters on the third floor [of Headquarters], but a shock for my mother was to endure disturbed sleep from the two electric bells installed in their rooms."

DO YOU HAVE ANY ACCOUNTS OF THE OLD DAYS?

If so, then the Museum of Fire would be glad to hear them.It's not enough to simply preserve our physical heritage; we also need to preserve the 'flesh and blood' aspect of our history for future generations, before it's too late!

Orange



Pony rescued from a well

Shortly after 0720 hours on 21 May, FRNSW firefighters responded to a call reporting a pony had fallen into a well on a property just outside of Orange.

uzz, a two-year-old Welsh Mountain pony, had fallen 3m into a water well and appeared injured, cold and shaken after spending the night trapped.

"We put a rescue plan into place that required a mobile crane, a vet, some help from local authorities and the rescue knowhow and experience of the firefighters at the scene," said Orange Station Commander, Chris Sanders. Climbing down into the well, Fuzz's owner and a local vet worked with firefighters to calm and secure him before the crane was carefully moved in to lift the pony out of the well. Approximately two hours later the pony was hoisted above the well and safely dispatched onto dry ground. Once back on terra firma, Fuzz was treated for his injuries, rugged up and reunited with his grateful owners.





1942 FORD CAN

One of the significant vehicles recently placed on the State Heritage Register (see Fire & Rescue News, May 2013) is a 1942 Ford Canteen.

he need to provide refreshments to firefighters during prolonged incidents has long been part of fire brigade life. Reports on fires back to the early 1900s mention basic sustenance such as tea, coffee and biscuits being provided.

In Sydney, supply of refreshments appears to have been organised "as required" at the time, but by the late 1920s, a special store had been established in the Headquarters Fire Station. In February 1928, the Board of Fire Commissioners formally approved of equipment being installed at the station for the provision of refreshments at fires: A quick boiling urn or copper with a close fitting top and draw off tap; a group of Bunsen gas burners for heating purposes; two four gallon cans of the milk can type; two dozen half pint enamel mugs. The actual refreshments to be kept in stock included: 6 lbs of tea and 6 lbs of ground

coffee in sealed tins of 1 lb each, 28 lbs of sugar kept in a sealed tin or wooden bin, six tins of condensed milk, suitable small tins of biscuits such as wheatmeal or thin cabin, and cheese in packets.

All this material was to be kept in a locked cupboard, with the key kept in a sealed bag in the watchroom. In the event of refreshments being required the Senior Officer at the fire was to send a telephone message to Headquarters (no radios in those days) advising the number of men to be fed - the Senior Duty Man was then to "immediately prepare the required tea or coffee, and send on the food and utensils by the truck provided". The Brigade's Hudson truck, or an alternative, was to be "always held in readiness for such work". Bread and butter and other perishable foods could be ordered under written instructions from the Senior Officer in charge of the fire "in extreme cases". Intoxicating liquor was not

allowed "except in the case of accident or illness, and then only with permission and instruction of a Medical man".

While the Brigade was probably aware of the use of mobile canteens overseas, it certainly didn't consider the local firefighters warranted investment in what would be a little-used "luxury". However, Australia's involvement in World War 2 from the early 1940s brought changing circumstances. The risk of an attack on Sydney resulted in acquisition of many extra fire engines under the lend-lease aid scheme, and a large corps of Reserve and Auxiliary firefighters were recruited to help man them.

By November 1940 a Women's Fire Auxiliary (WFA) had been formed to provide dedicated assistance to the NSWFB in case of attack. WFA members were put through an eight week course in air raid procedures, in which they were instructed in such matters as dealing



In March 1943 the Board was able to order a Ford cab-over-engine model T5860 chassis (158" wheelbase) with a Mercury engine (a higher powered version of the standard Ford 'flathead' V8), which was delivered to the Brigade on 13 October at a cost of £565/15/0 (inc sales tax).

The bodywork was then constructed in the Brigades' workshops, with some finishing work and internal fit-out contracted out to local firms. A hot water storage tank, a pie oven, large tea, coffee and soup urns were fitted. A gas powered water heater

was later added. Various cups, saucers, plates and cutlery were also fitted.

The canteen was officially installed at Headquarters on 21 July 1944, at a final reported cost of £1968/19/11. A hot water boiler was installed in the station to enable the urns to be filled prior to responding to a job. While the canteen carried basic snacks such as tea, coffee, biscuits etc on board, substantial meals such sandwiches and pies were obtained

It is believed to be one of only two or three

surviving models

from the Railway Refreshment Rooms kitchens at Central Station.

The unit operated at a fire for the first time on Wednesday 2 August 1944, at No. 7A and 7B Wharf, West Circular Quay.

The canteen spent its entire service at the Headquarters Fire Station (now City

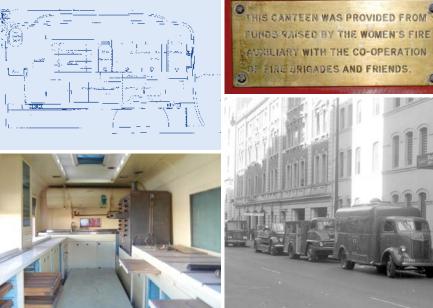
of Sydney) in Castlereagh St, until withdrawn in April 1974. In its 30 years of service it ran just 3,500 miles (5600 km). It was to be auctioned off. but the Board agreed to place it in the custody of the Historic Fire Engine Association pending

establishment of a suitable museum. In 1981 it joined the (then) NSW Fire Service Museum collection in The Rocks area; this is now the Museum of Fire at Penrith. The Museum's volunteers have recently undertaken an extensive cosmetic restoration of this unusual vehicle, and are currently fitting a reconditioned engine. It is believed to be one of only two or three surviving Australian manufactured examples of this chassis model.



with incendiary bombs, fires in the home, rescue work, first aid, operating chemical fire extinguishers, operating fire alarms and station procedures including watchroom duties. Upon passing an examination, they were attached to their local fire station, where they continued to advance in their training. They were required to attend a 11/2 hour drill session one night per week, in addition to one night per week performing watchroom duties.

The WFA became heavily involved in fundraising activities. In July 1942, WFA members decided to raise funds for the purchase of a mobile canteen, to be presented to the Brigade for use at major fires or other major emergencies. A target of £1000 was set and various activities were undertaken. The project concluded in December 1942 with a total of £3323/7/4 being raised.







Gas explosion destroys house at Tuncurry

At 1051 hours on Friday 14 June, FRNSW was called to the Lakes Way, Tuncurry, on the NSW Mid North Coast.

n arrival, crews from 295 Forster and the NSW RFS found a house which had been totally destroyed by an explosion. The force of the blast had scattered debris across a wide area. Firefighters extinguished a fire that started after the explosion; and after

searching the ruins, discovered the body of an elderly man among the rubble.

Decontamination procedures were put in place due to the presence of asbestos among the debris. The house next door was also partly destroyed in the blast. The Lakes Way was closed for some time and traffic diversions were put in place. The incident attracted significant media coverage. Police and NSW RFS fire investigators are investigating the cause of the explosion which is believed to have been caused by leaking gas.

WHAT'S NEW at the Museum of Fire

By Gary Boyce, Museum of Fire



he Museum of Fire is currently in the process of adopting new ways of interpreting and presenting our firefighting past. With a new emphasis on the 'flesh and blood' aspect of our history, displays are being developed along thematic lines.

Nearing completion are displays featuring early Sydney firefighting, the horse era and the Metropolitan Fire Brigade. Projects for the future include medieval firefighting, wartime firefighting, our first four fire stations, recipients of

It's time for a change – and changes are afoot!

the Conspicuous Bravery Medal and the FRNSW Honour Roll.

Research has unearthed archival footage of horse-drawn fire engines careering down the street – followed by firemen getting the old turntable ladders to work (circa 1890s). This is backed up by firemen performing drill operations (circa 1916). This footage will eventually be incorporated into the display using up-to-date audiovisual technology. Another item to watch out for will be James Jones, the old Head Coachman, reminiscing about his career with the NSWFB.

Of course, the old fire engines and equipment are still there, ranging from the early 1800s to modern times.

We'll keep you updated. **END**

Congratulations firefighters

In joining ambulance officers as the most trusted profession in the 2013

Reader's Digest 'Most Trusted' survey.

Congratulations



Fire officers recognised in Australia Day and Queen's Birthday Honours

ommissioner Greg Mullins has congratulated the eight FRNSW members who were awarded the Australian Fire Service Medal, three as part of the Australia Day Awards and five for the 2013 Queen's Birthday Honours list. The Australian Fire Service Medal is one of the highest honours an Australian firefighter can receive. The medal is awarded to firefighters who have demonstrated exceptional service, initiative and performance during their careers – well beyond the normal expectations of a person working in their position.

Commissioner Mullins said all eight AFSM recipients this year were dedicated and outstanding firefighters. "Each of the recipients of this prestigious medal has demonstrated an exceptional level of service and commitment to FRNSW and to the community, some for many years. Whether it's contributing to fire safety in their local communities, mentoring young aspiring firefighters or the development of national training packages or legislation, each of these fire officers has made an invaluable contribution to FRNSW and the people of NSW," he said. "None of our firefighters perform these roles for public recognition but the contribution they make to protect our community deserves our gratitude. These awards thank the members of our emergency services for their work and commitment to serving our community and I congratulate all of the FRNSW recipients.'



The following five FRNSW firefighters received AFSMs as part of the 2013 Queen's Birthday Honours list.

Chief Superintendent Christopher Lewis

hief Superintendent Chris Lewis was appointed to FRNSW (then called NSWFB) in April 1980 and has served for over 33 years, providing professional service to the people of NSW. He has played a critical role in new and innovative fire investigation methods at both the state and national level. He led the reconstruction research burns in the aftermath of the tragic Quakers Hill Nursing Home fire which resulted in legislative change making it mandatory to have sprinklers fitted in all NSW residential aged care facilities. He has also overseen the state's fire investigation methodologies which has almost halved arson-related fires in NSW since 2001.

Station Officer Graham Tait Alexandria

tation Officer Graham Tait was appointed to FRNSW in June 1982 and has dedicated the last eight years of his service to the specialist field of operational communications where he has provided exemplary leadership in the specialist area of emergency communications systems. His skills were fully put to the test during his deployment to the 2011 Christchurch earthquake and Japanese earthquake and tsunami disasters. Graham is highly regarded among his peers and other emergency service personnel throughout Australia and internationally for his immense knowledge, passion and dedication to this highly specialised and demanding field.

Senior Firefighter Cathryn Dorahy Wollongong

enior Firefighter Cathryn Dorahy has served as a member of FRNSW with distinction for 19 years and has been instrumental in improving fire safety outcomes for at-risk members of the community, including working tirelessly to form links with Islamic women who were not being reached effectively by traditional fire service education programs. She has also worked to promote and support women in firefighting, and is a foundation member of Women and Firefighting Australia. She has personally mentored dozens of women who have entered the firefighting profession, and has worked with management and Human Resources staff on improvements to recruitment and retention practices to increase the number of women employed as firefighters.

Left to right:

Retired Captain Robert Tinker, Chief Superintendent Christopher Lewis, Commissioner Greg Mullins, Captain Darrell Paul, Senior Firefighter Cathryn Dorahy and Station Officer Graham Tait.

Captain Robert Tinker Parkes

etired Captain Tinker was appointed to FRNSW on 1 November 1968 and served for 45 years, retiring last year, providing professional service to the people of NSW and particularly the community of Parkes. As the Captain of the Parkes Brigade, he was directly responsible for influencing improvements to fire service delivery by working very closely with other emergency services; and through effective planning, consultation and teambuilding, he has influenced a positive shift in workplace culture and work practices. He is also recognised as a mentor to younger firefighters, not just in Parkes, but across the western regions of the State.

Captain Darrell Paul Canowindra

aptain Darrell (Billy) Paul joined FRNSW at Canowindra as a retained firefighter on 1 June 1969; and less than 10 years later was appointed Captain on 14 April 1979, a position which he continues to hold today. He is renowned throughout rural NSW as a keen advocate of operational training programs, particularly the Firefighting Championships held regularly throughout regional NSW. He is recognised throughout the Canowindra community, not just as a firefighter, but also as a hard working business person with a floor covering/furniture business, three sheep/wheat farms and a dedicated member of numerous sporting and community groups.



Left to right: Station Officer Wayne Staples, Alexandria, Commissioner Greg Mullins, Chief Superintendent Greg Buckley.

The following three FRNSW firefighters received AFSMs as part of the 2013 Australia Day Honours list.

Chief Superintendent Greg Buckley

hief Superintendent Greg Buckley was recognised for his work in the area of building fire safety and research. During his 30 year career, he has become one of FRNSW pre-eminent experts in this field, and has been heavily involved in developing policies and legislation that have changed fire safety standards in Australia. One the most significant changes he has been involved in is the recent legislative change, following the tragic nursing home fire in Quakers Hill, which has made it mandatory for sprinklers to be fitted in all NSW residential aged care facilities. He also coordinated the involvement

of fire agencies in a research project in the aftermath of the 2009 Victorian bushfires, which resulted in a review of Australian Standards on building in bushfire prone areas.

Station Officer Wayne Staples Alexandria

tation Officer Wayne Staples was recognised for his leadership in the field of rescue, throughout his 32-year career. He has developed a range of training packages, which have been used across FRNSW, and has contributed to development of a specialised urban search and rescue support vehicle - the largest of its kind in Australia. He was also part of the urban search and rescue team deployed to Taiwan following the earthquake in 1999 and was part of the FRNSW response to the Thredbo landslide in 1997. He now works as a Senior Instructor on the mid-north coast, and his leadership,

commitment and positivity in this role has been described as 'infectious'.

Captain David Milliken Thredbo

aptain David, 'Spike' Milliken, who joined the organisation 25 years ago, has been at the helm of Thredbo Fire Station for 21 years. A professional ski patroller at Thredbo and the surrounding snow fields, his knowledge and expertise in both firefighting and rescue operations in extreme weather conditions has been invaluable to FRNSW. He has helped developed training packages for firefighters and he led the first responding FRNSW team following the landslide at Thredbo in 1997.

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Factory inferno at Rosehill

On 31 May crews battled successfully to contain one of the largest fires Sydney has seen for many months, saving six factory units in a complex of seven units.

he first '000' call came in 0356 hours with reports of smoke issuing from an industrial and retail complex on James Ruse Drive at Rosehill. 27 Parramatta responded to the address given and initially thought that the area was enveloped in fog. Looking further down the road, they then saw flames issuing from the roof of a large two-level shop and factory complex. SO Peter Brady sent a 'Red' message for a 2nd Alarm, then after a quick size-up upgraded the response to a 3rd Alarm. It soon escalated to a 5th Alarm, and then a 6th as the size of the building and extent of fire and exposures became apparent.

The fire had taken hold in a two-level electrical retail outlet measuring 10 x 30 metres which

occupied one unit in a row of seven. The fire was fuelled by large amounts of electrical, plastic and packaging items and there were major fears that the fire would spread to adjoining units and eventually involve the entire seven unit complex. With good placement of aerials and a sustained defensive attack, the fire was successfully contained to the unit of origin with adjoining units suffering smoke heat and water damage.

At the height of the blaze James Ruse Drive was closed to all traffic to enable hydrants across the roadway to be used. This caused major traffic issues during the morning peak hour traffic period. A large plume of smoke was visible right across Sydney with residents as far away as Redfern complaining about the smoke and fumes. The fire attracted a large amount of media interest due to the traffic and smoke impacts across Sydney. Crews remained on scene all day to continue overhaul and salvage operations. The unit of origin was totally destroyed with structural damage so severe that investigators determined it too unsafe to attempt any investigations until the following day.

The fire crews who initially responded were from 27 Parramatta, 19 Silverwater, 65 Rydalmere, 72 Merrylands, 57 Wentworthville, 30 Lidcombe, 55 Guildford, 59 Eastwood, 97 Huntingwood, 16 Concord, 67 Northmead, 15 Burwood, 50 Hornsby, 1 City of Sydney, 13 Alexandria, 85 Chester Hill and 23 Gladesville. A full incident management team, the Commissioner and Deputy Commissioner also attended. **Urban search and rescue efforts**

On 4 June, shortly after the second anniversary of the 6.3 magnitude earthquake which devastated the New Zealand city of Christchurch, New Zealand Government officials attended a special ceremony at FRNSW's State Training College at Alexandria to thank 135 Australian emergency workers who came to the city's aid after the disaster.

he Minister for Police and Emergency Services Michael Gallacher, FRNSW Commissioner Greg Mullins, New Zealand High Commissioner Martyn Dunne and New Zealand Fire Service Chief Executive and National Commander Paul Baxter all paid tribute to the firefighters, paramedics, doctors, police officers and engineers who responded after the earthquake hit on 22 February 2011.

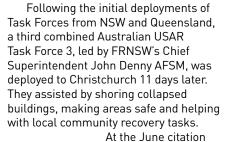
FRNSW led two heavy urban search and rescue (USAR) Australian Task Forces to Christchurch, and were the first international rescue team to arrive in New Zealand shortly after its Government requested assistance from other countries for its exhausted and overwhelmed local emergency services workers.

At the 4 June ceremony, each emergency services worker was presented with a special New Zealand Government citation. Task Force 1 Leader, Chief Superintendent Gary Picken, said the citations were great for the USAR team members as well as their families. "It was a very personal thing for everyone there," Chief Supt Picken said. "It was also recognition for a job well done."

USAR response to Christchurch cemented the already close relationship between the two countries' emergency services. "I think the friendship and mutual respect was always there

between the Australian and New Zealand emergency services," Chief Supt Picken said. "But the response to the Christchurch earthquake was a case of both countries' emergency services delivering in very difficult circumstances."

Task Force 1 team members successfully performed numerous USAR tasks, including the widely-reported rescue of a woman entombed in the collapsed Pyne Gould Building. The team searched and cleared more than 700 buildings while experiencing constant aftershocks.



"It was a very

personal thing for

everyone there"

At the June Citation presentation, Minister Gallacher said the scale of the emergency was incredible. "Over 23 days, Task Forces from Australia and around the world worked for hours on end searching for people in the rubble, carrying out

repairs to homes and business, assisting the elderly in the community and even recovering computers and hard drives from the crumbled buildings so that business owners could begin to rebuild their lives and the city," said the Minister.



Mr Gallacher and Commissioner Mullins also took the opportunity at the New Zealand citation presentation to present a Unit Commendation for Meritorious Service to the FRNSW project team that prepared the NSW Heavy USAR Task Force for the International Search and Rescue Advisory Group International External Classification exercise which was held in Brisbane in September last year.

Commissioner Mullins said the team had successfully achieved accreditation with the United Nations, confirming that NSW has one of the most highly trained and best equipped USAR Task



Forces in the world. "Deploying to natural disasters both nationally and internationally requires a range of different skills and expertise," he said. "While the NSW Task Force is led by FRNSW, we work with personnel from the State Emergency Service, Ambulance Service of NSW, NSW Police Force, NSW Public Works, AusAID and the Federal Attorney General's **Department - Emergency Management** Australia. The close working relationships between personnel from the various agencies is one of the keys to success at an emergency, and certainly contributed to the achievement of the UN classification."

On Wednesday 24 July, our USAR team members were once again recognised by an official reception held by Her Excellency the Governor of NSW, and Sir Nicholas Shehadie at Government House to recognise those emergency services workers who assisted in the Christchurch Earthquake Recovery in February 2011.

Awards for **Meritorious Service**



Station Officer **David Tai**

tation Officer David Tai received a Commissioner's Commendation for Meritorious Service at the end of May for his work researching and writing about former Chief Officers and Commissioners of the NSWFB. SO Tai's research included locating the final resting place of the first NSW Fire Chief, Supt William Bear, in an unmarked grave at Waverley Cemetery where another former Chief, Alfred Webb, was also buried.



Inspector Nicholas Ferrante

nspector Nicholas Ferrante received the Commissioner's Commendation for Meritorious Service at the beginning of June for his work researching the Blue Card incident management training system, which is based on learnings from the Phoenix Fire Department. Insp. Ferrante managed the evaluation and delivered a paper on it. His findings had important lessons for the early stages of incident management and importance of staging, command positioning, communications, and developing the incident management structure as soon as possible. More than 100 senior officers, including Commissioner Mullins, have completed Blue Card certifications.

Southern NSW



Tornado rips through Kiama

22 FEB

Just after 0300 hours on 24 February a mini tornado ripped through Kiama, tearing a path of destruction from South Bombo beach in a southwesterly direction.

he storm resulted in massive amounts of damage to properties and vehicles, including the roof being torn off 346 Kiama Fire Station and damage to appliances housed in both bays.

The ensuing response and recovery operations lasted over the next five days with multiple FRNSW strike teams providing support to the NSW SES. The local Emergency Operations Centre was fully operational over this period with all emergency service organisations represented by a Liaison Officer operating to support the Local Emergency **Operations Controller and SES as** combat agency.

FRNSW resources provided significant support during this period with a primary

focus on asbestos assessment and management, shoring of unstable structures and rendering assistance to residents and damaged structures.

Around 160 properties were assessed for asbestos contamination by Hazmat personnel with five sites testing positive for contamination. FRNSW liaised with the Kiama Local **Emergency Management Committee** and Kiama Council to bring in contractors to clean up the asbestos.

The response and recovery operations conducted in Kiama demonstrate the collaborative arrangements that exist between all emergency services across the Illawarra region.



Former Inspector (equivalent to today's rank of Superintendent) John Boath, considered by many as the 'founding father' of fire investigation in the NSWFB, sadly passed away on Monday 18 March 2013, aged 83 years.

Analysis

to retired Inspector John Boath AFSM

nspector Boath enjoyed a long and distinguished career in the NSW Fire Brigades, joining in 1954 at age 25 years, retiring 35 years later in 1989, and going out on a high note being awarded the Australian Fire Service Medal (AFSM) in his final year of service.

His distinguished career began at Headquarters (now City of Sydney Fire Station) where he remained for a year before moving to Stanmore, then Redfern in 1957, Bankstown in 1958 and back to Headquarters in 1966.

From 1967 until 1971 Inspector Boath served as Station Officer at Lithgow Fire Station and was then transferred to Darlinghurst in 1972. He was promoted to District Officer in 1975 and served in the Fire Prevention Department until 1979.

In 1979 as a District Officer (today's rank of Inspector) he became the NSWFB's first operational media liaison officer, based out of Alexandria. He continued in this role until 1984 when he was transferred to Lismore and promoted to the rank of Zone Inspector. In 1986, Inspector Boath returned to Sydney where he established and headed up the Brigade's first ever Fire Investigation Unit (FIU), now called FIRU, which was then based at the old Brigades' workshop at Five Dock.

His son, Supt. Gordon Boath, Manager of Operational Research and Analysis at the Lessons Learned Centre, said fire investigation remained his father's passion long after he retired. "He actually established his own fire investigation business when he retired and became very successful. He had a reputation nationally as a very capable fire investigator."

In 2006, the NSWFB named a training room at Greenacre after Inspector Boath in recognition of his pioneering work in establishing the Fire Investigation Unit – the first of its kind in Australia, and still a leader in the field. Chief Superintendent Chris Lewis, former manager of FIRU, stated that the high regard that FIRU was held in around Australia and overseas, had its foundation in the work that "Inspector Boath was a fine officer and one of the most highly skilled and respected fire investigators in the country

Inspector Boath and the other founding members undertook in establishing the original unit 27 years ago.

"Inspector Boath was a fine officer and one of the most highly skilled and respected fire investigators in the country. His passing is a loss not only to his family and friends, but to FRNSW," said Commissioner Mullins. "He is remembered fondly and with great respect by his former colleagues."

'Hats off' to our firies

Deaths and retirements

These are some of the many messages of thanks and appreciation that we get for our work in serving and protecting the community.

Monica Glenn

Recently my husband had a fall in Smith St, Kempsey, outside a store. The fire brigade were first on the scene (because of the flooding), followed by the ambulance a little later which took him to the hospital ... The excellent service we received in Kempsey from the fire brigade, SES, ambulance, hospital medical staff and locals, is something we can be thankful of and makes us proud to live in this lovely town.

Nikki Guerin

A huge thank you to Clinton at Miranda for providing first-aid when my son was injured. As usual the firemen showed their professionalism, caring and competency!

Leigh Cavanagh

We would just like to say thankyou to Blacktown Fire & Rescue for opening their doors to Chloe & Lochie Bax yesterday afternoon. They thank you from the bottom of their hearts for showing them the truck & letting them climb in. You've won their respect for life - thanks Dragon & the team. We'll see you on Open Day at Schofields - our junior fire fighter cant wait. Thanks for keeping us safe.

Jan Whitaker

Thanks to all the people, Police, Ambulance & Fireys for attending the horrific house fire in St. Ives last night. Everyone was safe. You guys do an awesome job.

Sylvia White

I would like to especially mention the Cowra NSW Fire & Rescue members for volunteering to help us with BBQ on 27 April for the Relay for Life fundraising event which raised almost \$60,000 for the Cancer Council.

Vale: With gratitude for service to the people of NSW

Name	Station	Date
Retired Insp John Boath AFSM	City of Sydney	March 2013
Retired SO Dennis Moran	Greenway	March 2013
Retired Capt Maurice Harvey	Berrigan	April 2013
Retired SF Bruce O'Brien	Campbelltown	April 2013
Veronica Tobin	Administration Assistant, Accounts Section	April 2013
Retired Capt Arnold Saunders	Jerilderie	May 2013
Retired SO Richard Hastings	Cabramatta, Liverpool and Lidcombe	May 2013
Retired Storeman Gordon Lancaster	Greenacre	May 2013
Retired SO Denis Hinchey	E District	May 2013
Retired Engine Keeper Colin Campbell	Lawson	June 2013
Retired SO Gordon Morse	Headquarters 'B' platoon, Fleet Officer, Relay Room and Alexandria Comms	June 2013
Marian Wheatley	Technical Writer, Engineering Section, Greenacre.	June 2013
Retired SO Rod Cartlidge	Darlinghurst	June 2013
SFF David Turner	Arncliffe	July 2013
Retired Captain Morrie Dunn	Bangalow	July 2013
Retained FF Mick Griffiths	Kearsley	July 2013

Deaths and retirements

Farewell and enjoy 'you' time

Name	Station	Date Retired	Name	Station	Date Retired
RetF M Doughan	Tenterfield	11 January 2013	Capt J Neilson	Gloucester	26 April 2013
RetF R Ross	Junee	21 January 2013	SO J Edwards	Orange	26 April 2013
RetF C Gaynor	Narrabri	26 January 2013	SO R Casboult	Menai	26 April 2013
DCapt S Graham	West Tamworth	31 January 2013	SO P Collins	Sydney Comms	29 April 2013
RetF P Lane	Macksville	4 February 2013	Insp R Sinclair	Berkeley Vale	3 May 2013
DCapt D Hicks	Albury North	8 February 2013	SF M Paloff	Wollongong Comms	3 May 2013
SO G Kennedy	Manly	22 February 2013	SO B Symons	Education and Training	3 May 2013
SO D Casey	Dee Why	25 February 2013	RetF P Knight	Raymond Terrace	6 May 2013
DCapt R Wilkins	Belmont	4 March 2013	SO M Harrington	Sydney Comms	10 May 2013
CSupt T Milburn	Huntingwood	8 March 2013	RetF S Peate	Cessnock	10 May 2013
SO C Milburn AFSM	1 Seven Hills	8 March 2013	SO M Badman	Miranda	17 May 2013
Supt S McGuinness	Bathurst	8 March 2013	SO T Jeffcott	Building and Fire Safety	17 May 2013
QF P Vella	City of Sydney	8 March 2013	SF M Nolan	Newcastle	17 May 2013
SF J Cummings	Mascot	22 March 2013	SO R Moor	Campsie	17 May 2013
SF J Warwick	Turvey Park	22 March 2013	SF D Webb	FIRU Greenacre	17 May 2013
RetF T Gill	Taree	22 March 2013	SF M Campbell	Turvey Park	17 May 2013
Capt K Rhoades			RetF T Fitzgerald	Junee	17 May 2013
AFSM	Sawtell	22 March 2013	RetF M Sinclair	South Grafton	17 May 2013
SF B Henshaw	Newcastle	22 March 2013	RetF W Johnson	Turvey Park	17 May 2013
SF M Fitzpatrick	Chester Hill	29 March 2013	SF S McMillan	Wollongong	17 May 2013
RetF E Babula	Bowral	31 March 2013	SF F Petersen	Lane Cove	24 May 2013
Capt A Carey AFSM	Yass	31 March 2013	SF J Wilson	Education and Training	31 May 2013
RetF R Moody	Nowra	1 April 2013	RetF C Grieves	Yass	1 June 2013
SO M Wunsch	Wollongong	5 April 2013	SF W Heys	Umina	30 June 2013
RetF P Jackson	Bowral	8 April 2013	SF S Grover	Dee Why	30 June 2013
Capt P Rodgers	Minmi	12 April 2013	Insp R Brown	Sydney Comms	11 July 2013
RetF W Hill	Bateau Bay	12 April 2013	SF S McDonald	Sydney Comms	11 July 2013
RetF R Wilson	Wentworth Falls	14 April 2013	SF G Camilleri	Nowra	12 July 2013
RetF P Aitchison	Wangi Wangi	15 April 2013	SF K Parry	Riverwood	12 July 2013
Capt W Forster	Narooma	17 April 2013	SO W Garrard	Special Duties Initial Training	12 July 2013
SF J Thompson	Kogarah	19 April 2013	SO R Mattheus	Regional and Retained Training	·
SO J Tapper AFSM	Hazmat	23 April 2013	SF C Robinson	Cranebrook	19 July 2013
SF G Evans	Leichhardt	26 April 2013	SF P Rhodes	Newcastle Comms	22 July 2013



Fire & NSW Rescue NSW

CHANCE

