United Firefighters Union of Australia, Tasmania Branch

Tasmanian Bushfire Inquiry Submission

United Firefighters Union of Australia Tasmania Branch

28/6/2013

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INTRODUCTION

The United Firefighters Union of Australia Tasmania Branch (UFUA) has chosen to address specific aspects of the enquiries terms of reference. This is due to the broad nature of those terms and the clear need for all those involved including; the inquiry, the State Fire Commission, the Government of Tasmania and the public to prioritise the issues involved when acting on recommendations.

The UFUA has not commented on many aspects of the following issues but does not intend that this should be interpreted as approval or otherwise of all actions and circumstances effected by these issues, rather that the terms of reference of this inquiry do not allow full investigation of these issue. Issues not discussed include but are not limited to;

- Tasmanian government/TFS interdepartmental relationships for emergency management
- What houses were impacted, burnt, saved populations affected loss of life fire management.
- Bushfire CRC academic papers investigating public actions taken are not yet published so comment on the effectiveness of warnings can only be subjective although the fact that no lives were directly attributed to the fires is significant.
- The detailed history of land management from 1967 till 2013
- Did mitigation management plans have a direct impact on outcomes
- Current operational priorities
- Public alerts and warning systems.
- Recovery responsibilities
- The specifics of deployment of operational resources
- The use of up to date technologies to improve response communications and the general effectiveness of operational communications hardware

We have focused our submission on;

- The systems used for fire management in Tasmania and the adequacy of those systems

- The level of training and human resources needed to effectively run fire management systems including preparation and planning with specific examples included. We believe that these examples are endemic of overall issues

- Fire mitigation structures utilised in Tasmania.

- The current and future influence of climate change on emergency management in the firefighting context.

We believe that the recommendations outlined in the *2011 auditor-general special report no. 99* to the Tasmanian Parliament still have relevance to our state and that the inquiry should rely on this report to inform their future recommendations for improvement.

THE AIM OF THIS SUBMISSION

Much is made of bushfires in the media with reporting focusing on damage and loss, i.e.; loss of life, loss of property, loss of houses, loss of cars, loss of vans, loss of outbuildings and loss of infrastructure. To the UFUA it is disappointing that the efforts of firefighters and the Tasmania Fire Service are not reported more positively.

This paper will address the positive aspects of The TFS bushfire prevention strategy in the form of the community fire safety programs including school fire education and community bush-fire ready material and publications. These programs have been implemented by the TFS for many years and must be recognised as an effective tool in saving life and property.

It must be understood that, over time the investment in this strategy is beneficial but the benefits do not appear to be measured, nor does it appear that these initiatives are fully understood or appreciated by the community at large. In fact criticism is capable of being bestowed on the TFS for not promulgating the benefits of such programs to the community.

It is our view that the focus of media reporting should place recognition on the benefits of TFS community education and awareness programs and the efforts of firefighters that result in lives being saved and the minimisation of property and infrastructures losses. This paper would prefer the media to report a glass half full rather than a glass half empty following such disasters

OTHER FIRES NOT INCLUDED IN THE INQUIRY

It is with interest the UFUA notes that the significant fires that burnt near Collinsvale and Molesworth, burning at about the same time as the fires identified for this inquiry, were not subject to this inquiry. These fires;

- Posed a significant threat to the greater Hobart area.
- Had significant amounts of resources and funding dedicated to extinguishing them.
- Had successful strategies applied by TFS.

Are these reasons not to conduct a broader review? The UFUA encourages Government as a whole to review all operations it conducts, successful or otherwise, to help contextualise criticism and recommendations. It is not reasonable in our view to only hold an inquiry for agencies involved in natural disasters and emergency management without a balanced review of all circumstances involved and all matters being dealt with by that agncy.

BUSHFIRES; 1967 AND NOW

Bushfires are natural phenomenon that usually occurs in summer months when prevailing weather conditions are present. There is much material available on this subject and we will not restate all that material here suffice to quote from DM Chambers report of 1967';

> *"It is exceptional in summer to be without some degree of fire hazard in some parts, or a large part, of Tasmania, both in grazing and farm lands and in the forests"*
>
> *"The behaviour of wildfires depends upon the type of fuel being burnt and the meteorological conditions prevailing. The two most important categories are forest fire behaviour and grassland fire behaviour although these can be subdivided further depending on the type of forest or the type of grassland."*

(The Bush Fire Disaster of 7th February, 1967 Report and Summary of Evidence D.M. Chambers & C.G. Brettingham-Moore) p19

Some consideration of the damage by the 1967 bushfires is also cited in the report at p 17

'The enormous damage in this event occurred mainly in a seven hour period which commenced between noon and 1 pm and ended between 7 pm and 8 pm'

Prevailing conditions 1967 and 2013;

- High temperatures
- Strong winds
- Very low humidity
- Crisis did not end until the wind changed

The 1967 fire had a significant impact

- 53 deaths
- Several thousand temporarily homeless
- Burns and other injuries
- Infrastructure breakdown
- 1000 square miles of country burnt

1967 fire Causes

- Land owners burning off
- Incinerator escapes
- Breakaways from rubbish dumps
- Fire breaks that got out of control
- Malicious intent

It is clear from these basic comparisons that the fires of 1967 and those of 2013 occurred under similar conditions but with very different outcomes and these outcomes must be addressed by all interested parties to understand the campaign in 2013 and what can still be improved.

THE COMMUNITY IN BUSHFIRE PRONE AREAS

The landscape and land use in bushfire prone areas is changing. More people and industry are choosing to live or operate in bushfire prone areas. Farmers have always operated their farms in rural communities and this aspect of industry and domestic life is and has always been subject to bushfire. What is at risk in this industry is the farm stock, infrastructure outbuildings, fences plant and equipment and cropping and the obvious risk to human life.

Domestic residences are also being established in more remote and bushfire prone areas. The expansion of the urban rural interface is an increasing trend in Tasmania.

Industry is establishing in rural and isolated areas including the forests. Tasmania is keen to promote the establishment of industries that operate primarily in bushfire prone areas. The viticulture industry, aquaculture such as the infrastructure damaged at Dunalley), bee keeping and eco-tourism industries are all good examples.

Viticulture establishments, particularly if processing plants are developed on site is very infrastructure intensive.

Ecotourism, which the Tasmanian Government also actively encourages, is an industry that relies on an untouched native environment and is very hard to protect from a bushfire. Examples of such industries in Tasmania include but are not limited to the Tahune Air walk, Maria Island Walk, Apt Railway, and Huonville Retreat

Aquaculture is also a growing and well established industry in Tasmania with servicing infrastructure and hatcheries in bushfire prone areas. Apiarists are reliant on natural forests and many other expanding industries in Tasmania could be affected by a bushfire incident.

The question to consider is what level of responsibility does the resident, being either domestic, industrial, farming or a combination of all, bare to mitigate against a disaster such as a bushfire. Is it open to community to simply say well the Fire Service is responsible for preventing the loss of property? Or is there more to consider in this regard?

> *Generally there was a lack of public appreciation of the fire danger with a consequent indifference to it and this contributed to the severity of the losses which occurred*

(Chambers 1967 p8)

Fire management and response is a matter that has had undergone much scrutiny following major fires. This report will provide comment on both matters but would like to acknowledge the following extract from the TFS commissioned report by GHD Report for *Lessons Learnt; A Review of the 2006/07* Bushfire Season when describing fire management.

> *"Fire management is a complex field of endeavour. Essentially it is a process of risk management, which requires consideration and planning over long time scales, and across broad geographical areas. It involves wide ranging and ongoing interactions between a large number of government agencies, landowners and occupiers and private sector organisations. Fire management and routinely has to deal with difficult issues of prioritising and balancing the protection of a range of values including human life and health, property, (of wide ranging value and social importance) and environment protection involving a range of elements and competing needs. It is often the case that different groups in the community will have opposing views on aspects of fire management…"*

One of the major problems associated with fire management and firefighting is the location of homes, property, business and infrastructure in relation to natural bushlands and forests. It is also a problem for the TFS after an incident due to the substantial investigations that generally follow a bushfire in comparison to other natural disasters, The common theme that emerges following a bushfire is "how could this have happened?" and "why did it happen?"

The householder who builds next to the river does not appear to challenge the SES, following a flood that results in damage to property or infrastructure, in the same way the community wants answers from the TFS following a fire.

It is noted following the 1967 Bushfire the Mercury Newspaper printed the following extract from a Mercury Staff reporter;

> *… But above all;*
>
> *Who will accept responsibility for answering the victims' only question?*
>
> *"How can this happen?" Who Lit the Fires? Why? Very few if any started unaided. Who will see that it does not happen again?*
>
> *Who will ensure that adequate water and firefighting equipment – and organisation are available when the State again becomes a tinder box?*

(R.L. Wettenhall; Bushfire Disaster an Australian Community in Crisis p 217)

The following letter also appeared in the Mercury following the 1967 fires;

> *"The city could never have fire brigade big enough to cope with the emergencies of a fortnight ago…The only protection was to ensure that these who wanted to build in such places took adequate precautions to protect themselves and the community."*

(R.L. Wettenhall; Bushfire Disaster an Australian Community in Crisis p 227)

One of the community expectations is that following a bushfire there will be a substantive inquiry that has powers to set an agenda and effect change..

CURRENT AND PAST LEVELS OF SERVICE TO THE COMMUNITY

In 1967 the Tasmanian public were served, in the greater Hobart area, by 76 fire officers. These full time officers were deployed in; Hobart 52, Moonah 6, Clarence 12, Claremont 6,

(The Bush Fire Disaster of 7th February, 1967 Report and Summary of Evidence D.M. Chambers & C.G. Brettingham-Moore)

Currently the Tasmania Fire Service employs 112 Firefighters and Officers in the same area. These numbers were included in the current industrial instrument in 1997.

The Tasmanian Fire Fighting Industry Employees' Industrial Agreement 2010 - Clause 61 Staffing Arrangements states;

"A minimum of 112 operational officers and firefighters inclusive of a training crew in Hobart"

(Extract; Tasmanian Fire Fighting Industry Employees' Industrial Agreement 2010 Clause 61 Staffing Arrangements)

In considering this statistic one realises that this equates to an additional 36 full time career firefighters and officers employed since 1967. In the 46 years since the 1967 disaster less than 1 new firefighter a year has been appointed. i.e. recruitment since 1967 staffing numbers has only resulted in 36 new firefighters to boost the greater Hobart areas response capacity over a 46 year period. (Approximately .78 full time equivalent per year). In addition, since the establishment of the State Fire Commission and its operational arm the Tasmania Fire Service, firefighters are responsible for responses such as road accident rescue, hazardous materials incidents and a range of other emergency responses that were not required of them as outlined in the fire service act 1979.

In addition to the career firefighters today there are approximately 5,000 volunteer firefighters. There is approximately 30 career positions allocated by the TFS to support the Volunteer brigades. Volunteer numbers are quoted by the TFS as between 4,900 to 5,000. Volunteers provide a valuable resource to the TFS and are appreciated by the community. Volunteers give generously of a very important asset to the TFS and that is their time. The contribution of volunteer firefighters needs to be supported at a much higher level by the TFS that is currently visible to the UFUA. The situation needs to be improved. The TFS has a heavy reliance on volunteer support. The TFS will continue to need to rely on volunteer firefighters. Career staffing numbers are considered by the UFUA to be inadequate. The TFS need to allocate more staff resources to support Volunteer brigades.

RECOMMENDATIONS ON LEVELS OF SERVICE

The UFUA recommends;

1. That extra career crews be recruited by the TFS and station infrastructure be provided to support full time crews for the greater Hobart area at Kingston and Sorell. This will provide for improved operational capacity.

2. In addition the UFUA recommends that at least one additional field works position be created in each district. This will result in 11 positions being dedicated to improving volunteer training and brigade management. The level or classification of this position is open for discussion but the UFUA recognises that the additional position does not necessarily have to be at Station Officer Rank but should have a command and control capability.

CURRENT FIRE MANAGEMENT

STRATEGIES USED IN 2013

The UFUA considers the strategies undertaken by the TFS during the operational response to the "Forcett Fire", "Lake Repulse Fire" and the "Bicheno Fire" were appropriate and although there are many instances where improvements in operational response could be found, there is only a limited capacity to outline these matters in this submission. The pursuit of a larger range of issues in this forum is not possible as we simply do not have enough time.

The UFUA considers primacy of life as paramount in any firefighting campaign. The UFUA acknowledges the strategy of protecting life by providing information and warnings during uncontrollable bushfires, whatever the cause and influence of mitigation strategies, was successfully utilized by TFS on the 4th of January and on ensuing days and related fires.

FIRE MANAGEMENT SYSTEMS

The Tasmania Fire Service utilises the Australasian Inter- agency Incident Management System (AIIMS) (Australasian Fire and Emergency Service Authorities Council, 2011) when managing fires and other incidents to which it has a legislated responsibility. This system is utilised by all professional fire services in Australia and assists in the effective integration of interstate assistance. The UFUA believe that this system is an appropriate model to be used during incidents such as those experienced at Forcett (Dunalley), Bicheno and Lake Repulse during January 2013. The UFUA also supports the continued use of AIIMS and incident management teams at all incidents and believe that suitably qualified persons should be deferred to as incident controllers under this system when present at an incident.

The Tasmania Fire Service has recently attempted to introduce a new level of management into the emergency response structure which reflects the State emergency management plan. This decision has resulted in the introduction of regional and state fire operations centres (RFOC and SFOC). Whilst the UFUA does not have any specific data showing that the use of RFOCs and the SFOC system impeded or improved performance, observed evidence from members reported at times significant confusion regarding the chain of command at incidents when an IMT and RFOC were both involved. We believe that there is significant risk that the continued use of these centres will result in failure of the command system unless documented processes and training are provided at all levels of response to all responding agencies involved in emergency management.

Our members have reported to the UFUA and during TFS sponsored operational analysis that the implementation of the AIIMS system, and the incident management teams that operated under that system, were significantly impeded in their operation because of a lack of adequately trained staff in key positions, a general lack of staff to appoint to all other positions and fatigue associated with excessive hours worked by the qualified staff available.

QUALIFICATION FOR ROLES IN INCIDENT MANAGEMENT

Within the operational sphere of AIIMS, and particularly at level 2 and 3 incidents, the UFUA believes that qualification for command and control roles can only be reasonably achieved by full time firefighting industry employees and that, when present at an incident or appointed to an incident management team, those most qualified and experienced should assume leadership roles. A level one incident typically involves single brigade responses and level two incidents may involve multiple brigades but are limited to single agency responses. Level three incidents involve multiple brigades, other emergency response agencies and land tenure.

The requirements for qualification for a supervision role under the nationally accredited Public Safety Training Package require a significant level of training and assessment.

To collect evidence that was valid, sufficient, authentic and current that an individual has attained competence to supervise an operational response, career firefighters normally undergo regular training and assessment over a two year period of full time work. This is in addition to the minimum of four years pre requisite training as a firefighter. After this period, the assessed officer has the capacity to supervise level 1 and 2 incidents.

It is a recommendation of the 2011 Auditor general's report (H M Blake, 2011) on bushfire management that, in line with 2004 COAG recommendations, training for firefighters and professional development of firefighters should be given a high priority by all agencies involved and that additional funding be allocated for this purpose. The UFUA believes that, although there is a willingness on the part of the TFS to pursue this recommendation, not enough resources are available to allow for the basic training of firefighters or the professional development of the firefighters who undertake incident management team roles.

One of the most important roles during major bushfire firefighting is that of the Sector Commander.

This officer has a primary role in implementing the plan developed by the incident control team on the ground and passing information and situation reports from the fire to the incident control centre.

As quoted from the TFS Sector Leader training guide;

> "Span of control relates to the number of groups or persons who can be successfully supervised by one person. It can have a maximum ratio of 1:7; however the ideal ratio is 1:5."

The TFS does not possess adequately trained sector commanders to achieve optimum outcomes because it cannot achieve the recommended ratios for span of control at times of peak demand.

The ideal 1:5 span of control level is not only restricted to the role of sector commander. It is an underpinning theory of the entire AIIMS incident management system for all roles in incident management. AIIMS relies on the scalable expansion and contraction of the IMT dependant on

demand. When the ratio of the span of control is exceeded, the incident controller must reduce the span of control with the provision of more, qualified team members.

The ratio used by the TFS as stated earlier as being ideal is mid-range and is generally on the ratio of 1:5.

This means each Sector Commander is responsible for five crews and each Divisional Commander is responsible for five sectors. The UFUA considers it unrealistic in a significant incident to exceed the span of control beyond the 1:5 ratio.

These roles are significant and the responsibility that attaches with each role is equally significant. These roles should not be delegated lightly. These roles are not a development opportunity in a significant bushfire situation. Experience and up to date knowledge of current fire fighting operations, equipment, capacity, realistic outcomes, deployment strategies and knowledge of the phenomena that is a bushfire is required in order to carry out these functions.

Given the levels of operational knowledge required to competently fulfil these functions these functions must fall to experienced firefighters with up to date knowledge of firefighting capacity, topography and a sound understanding of how a bushfire may react given the fuel load.

Sector Commanders are pivotal in fire suppression operations (GDH, 2007, p. 6)

Tasmania Fire Service Report for Lessons Learnt: A review of the 2006/07 Bushfire Season, November 2007

A broader example of the need for qualified operatives in incident management teams can be seen in the provision of communications (radio, call and dispatch) services within the IMT and generally during the incidents in question. During the fires, communications between the forward operational firefighters and the IMT operations section were conducted by volunteer radio operators with little or no fire response experience and minimal training regarding TFS operational radio procedure, firefighting operations or IMT structure.

It has been noted in feed back to the UFUA that comms messages were often convoluted and delayed. Information being actioned by incident management teams, at times, during the bushfires in question was frustrated by inexperienced comms operators not knowing what to do with information coming in and not being capable of prioritising that information in a timely manner. On occasion the information was passed around without actioning.

The UFUA understands this occurred, in part, because the majority of comms staff deployed in IMTs were in the opinion of the UFUA inadequately trained and comms were understaffed. The UFUA considers it important for there to be a direct operational comms system consistent with the operational chain of command in IMTs

Communications between the IMT and the operational firefighters is of pivotal importance. "*Communication plans are critical and need to be developed as early as possible*". (GDH, 2007, p. 6)

The TFS does not currently have the capacity to supply qualified emergency communications specialists for this role in an emergency response without reducing "ordinary" services.

Once again, as with operational firefighters in positions of command and control, fire incident communications specialists require in excess of two years training and experience to effectively and safely manage fire ground communications at an incident. The role cannot be conducted by inexperienced staff without introducing the possibility a high degree of risk.

The operators in the TFS call and dispatch centre receive a minimum of three years accredited training to equip them with the skills required during major incidents. Specifically, an operator will be required to possess Certificate III in Public Safety (Emergency Communications Centre Operations) to be able to carry out their role.

A Leading Communications Officer who TFS employ to supervise up to three others during normal operations requires Certificate IV in Public Safety (Emergency Communications Centre Operations).

Prior to 2008, FireComm (the TFS emergency call and dispatch centre) was struggling to maintain effective services because of increased demand and structural deficiencies.

As a response to this need TFS instigated a performance review of the centre which was undertaken by KPMG. The report was presented to the then Deputy Chief Officer, Mike Brown, in December 2008.

The KPMG report clearly states that the work load in this area has continued to increase steadily since a previous review undertaken in 2005 and that the development of greater qualified staff to provide services at peak demand times was appropriate.

The KPMG review acknowledges the scarce funding available to TFS and presented several options for improving performance based on limiting roles and functions of FireComm, improving consistency of performance by reviewing and upgrading standard procedures, building flexible work load models that address seasonal needs and improving the leadership and culture of the group.

In 2010, TFS developed plans to address the recommendations, provided staff to assist in the change management process and upgraded several core infrastructure needs including telephone switching systems, and major IT hardware and software systems that support call and dispatch services.

TFS are to be commended for the significant funds they provided and the foresight in recognising the need to change in order to cater for the increasing needs of the Tasmanian public.

It should be of great concern to the Tasmanian public that the State government is proceeding under the guise of “Interoperability” with plans to downgrade TFS emergency communications by diluting capacity in order to support underfunded and poorly managed police infrastructure and human resources.

It would be inappropriate in the extreme to further strain this resource in order to “prop up” other less well managed and ailing emergency response systems in other emergency response departments/sectors.

Importantly, the KPMG review recognised the need for developing the complex skills required of the emergency communications operator role.

Several recommendations were made including;

- direct Firecomm operator participation in IMTs,
- periodic off site training to maintain and upgrade skills and
- that a dedicated trainer be appointed to support training. (This recommendation has not been addressed in any meaningful or structured way to date.)

Even minor instances of communication failure during incident management could result in serious injury or death. It is the belief of the UFUA that TFS were fortunate not to encounter this circumstance during the fires subject to this inquiry. The UFUA considers the only way to ensure effective communications services are provided during major incidents is to provide well resourced, trained professional operators in incident management teams.

Chain of command from incident controller /management team to Divisional and Sector Commanders needs to be clear and concise. All officers need to be comfortable that the system is set up correctly and is working and that communications systems are effective. Timing is often critical. How a resource is dispatched with clear link to the IMT to Operations and back needs to be understood. The firefighters on the fire ground need to know that the chain of command systems are working and in a worst case scenario that those in charge of the operations are on top of the firefighting strategy in order to notify firefighters to withdraw if the fire front changes.

At times it was noted that the Sector and Divisional Commanders on the fire ground could not contact the IMT operations officer. This is problematic as these Commanders may be communicating with a large number of vehicles (30/40 vehicles) but cannot always contact the direct supervisor in the IMT.

It was also evident to the UFUA that during the operations there were at times a disconnect between Firecomm and the incident management team resulting in inefficiencies in vehicle logging and dispatch procedures. It is not unreasonable, given the circumstances surrounding the fires that occurred that vehicles and people incorrectly logged onto the fire ground are at best wasting scarce resources and at worst endangering lives.

TFS struggles with the need to provide all those in command roles (Sector Commanders, Divisional Commanders, safety officers etc.) with adequate hardware such as radios, mobile phones or vehicles at times of high demand.

STAGING AREAS AND RECOVERY AREAS

The use of staging areas for forward deployment of operational resources is normal accepted operational practice. Public perceptions in the Dodges Ferry area that the staging point was a refuge and recovery centre impeded operations.

Correct demarcation of these functions must be made to ensure the effective and efficient service by both. This requires appropriate training for people working in both areas and a degree of public education.

Staging area managers, many of whom felt that they had been given inadequate training, were often unsure of their responsibilities and took on many duties associated with recovery operations. It would be very difficult for any member of our community to turn away a person in distress, who is seeking refuge and assistance at a staging area, particularly when roles are confused and an alternative is not immediately apparent to the manager because recovery operations were not yet established or promulgated.

The confused clarity of roles in this instance also impeded operational performance by creating an untenable workload for the individuals involved. Clear clarity of role, public information during the incident and prior education for the public and training for recovery centre and staging area staff are essential.

TFS NON ROSTERED SHIFT WORK STAFF

It is the view of the UFUA that many of the people involved in the regular day to day work of the TFS, including Building Safety, Community Education, Tas Fire Training and other "non-operational" roles are not fully supported in maintaining operational readiness for response roles and are therefore not fully utilized during emergencies. These people are collectively referred to as *non rostered shift workers* under the firefighting industry award.

The TFS employs many staff throughout the organization who have moved from a direct operational response role to other prevention, community education or training roles. The UFUA believes that utilizing these people in incident management teams (at all levels, operational response or otherwise) will assist the TFS in ensuring adequate resources are available at times of high demand. Physical resources in these work units (such as vehicles and work spaces) should also be included in TFS resourcing models for surge capacities during bush fires.

These people all possess qualifications in operational response but lack the opportunities to maintain all of those skills because of high workloads in their respective areas of responsibility. It is imperative to the maintenance of this valuable human resource that the TFS provide regular competency maintenance programs for these employees. could contribute to the stretched resources valuable to incident management and response needs.

Fatigue is not systematically addressed during incidents.

The UFUA notes the following in Word Back (TFS internal communication document) January 2013 from the Chief Officer Mike Brown

> *"As our work continues and fatigue sets in, the potential for serious injury will increase.*
>
> *It is vital that we all continue to look after ourselves and each other. One thing we must all do is manage our fatigue.*
>
> *We can do this by recognising the signs:*
>
> - *Aching muscles or reduced performance*
> - *Sleepiness*
> - *Difficulty concentrating*
> - *Irritability*
> - *Excessive psychological response (eg. persistent anxiety or increased heart rate.)*
>
> *We can all reduce the risk of fatigue by:*
>
> - *Regularly checking how we are feeling*
> - *Holding back on volunteering for extra or longer shifts*
> - *Switching roles and doing low intensity tasks instead for a while*
> - *Encouraging each other to take time off and to share workloads*
> - *Doing light exercise like walking between shifts (as this helps recovery)*
> - *Drinking plenty of water and replenishing electrolytes if needed*
> - *Eating high carbohydrate food with slow release of energy (eg. wholegrain breads or cereals)*
>
> *As well as the risk of physical injury, we all need to be aware of the emotional impact of what we are doing, seeing, feeling or hearing.*
>
> *We can keep up our resilience by:*
>
> - *Getting enough sleep and rest*
> - *Plenty of healthy food and water*
> - *Talking with loved ones*

- *Taking short breaks*
- *Sharing our thoughts and feelings with someone we trust.*

People's emotional reactions to crises vary. However, if you're not sure about how you are coping, or if you a worried about something, please arrange for a free and confidential chat with a worker from Converge International. Converge is TFS' Member Assistance provider and they can be contacted on Free call 1800 337 068

TFS also provides our Critical Incident Stress Management (CISM) service. This is also a free and confidential service. It provides support for members who are involved in any situation that has the potential to produce a high level of immediate or delayed emotional reaction.

We can each contact CISM for support if we feel we need it. Incident Controllers, District Officers, Brigade Chiefs and Managers are required to notify CISM if they become aware of anyone who has been involved in potentially stressful or traumatic experience. CISM can be contacted on 0427 181 207 or by ringing FIRECOMM on 6230 8420 and asking for a referral.

Thank you once again for your outstanding commitment to your communities and to TFS.

Let's keep on helping each other to be safe.'

These words are certainly well meant useful advice but they do not amount to a systematic procedure for the management of fatigue in a high risk environment and occupation

It is our belief that fatigue and the limited qualified human resources available to the TFS contributed to some delays in emergency response and to possible threats to public and fire fighter safety.

Pre planning for events like the bushfires subject to this inquiry has improved in TFS but it needs to be stated that pre planning does not appear to have occurred for the possibility of the ongoing management that was required. The UFUA believes this was not possible largely due to inadequate career staffing levels. This is accentuated levels of fatigue in all areas of IMT management. Time on the fire ground coupled with travelling time to and from the incident (which can be extensive when out of area crews are used) all contribute to fatigue and safety concerns (GDH, 2007, p. 6)

As stated earlier, whilst TFS pre planning acknowledges the need for staff at time of incident it does not appear to consider staffing levels when planning for longer ongoing incidents. In fact the UFUA considers this will always be the case given current operational level of staff numbers and limited surge capacity that exists within career crews.

Career firefighters have to regularly perform overtime on normal shifts to cover absenteeism due to minimum staffing levels currently within the TFS. There effectively is little or no surge

capacity in full time career ranks. Full time career firefighters from the North and North West made themselves available on their days off to assist with the southern fires.

The TFS were reluctant to place too many demands on the Northern firefighters because they were aware it could impact the TFS capacity to recall if a number of incidents occurred in the North. This was coupled with concerns the TFS advised to the UFUA regarding career firefighters fighting fires on their days off and that this activity could impact on their recovery. Having these firefighters fatigued when they returned to operational duty at their respective stations was not ideal.

HOW CAN I TAKE BREAK?

Another important point to note is that senior firefighting personnel e.g. Chief Officer, Deputy Chief Officer, Divisional Commanders and Sector leaders and others need to be rested. It has been reported to the UFUA that this is good in theory but difficult in practice for a number of reasons. Senior fire management personnel build up knowledge of events at an incident and are regularly called by operations even on their rest days. If they take a day's rest and elect to play golf (for example) and relax they are held accountable by some members of the public if something goes wrong i.e. The public is unsympathetic and at times unforgiving with observations from previous fires and expectations like;

> "What! He is the Chief or Deputy Chief why wasn't he at the fire."

So on rest days firefighters are often reluctant to take the opportunity to publicly relax.

RECOMMENDATIONS FOR INCIDENT MANAGEMENT

The UFUA recommends;

1. That TFS immediately evaluate the capacity of its organisation to appoint fully staffed and qualified incident management teams. This recommendation includes operational team members at the fire (Firefighters) as well as all IMT staff working in planning, logistics, public information and operations roles.

   "*Incident Management teams need to established in a timely way and remain consistent"* (GDH, 2007)

2. That the TFS immediately act to identify and qualify staff to comply with the requirements identified at recommendation 1

3. Establish and maintain a clear chain of command and make provision for timely changeover of command and control roles

   "Changeover of Sector Commanders and IMT must have overlap and not conflict with crew changes" (GDH, 2007)

4. Only appoint experienced and qualified Incident Controllers, Sector Leaders and Divisional Commanders

5. Provide more training opportunities for the development of Sector Leaders and Divisional Commanders prior to "on the job" mentoring

6. The TFS actively engage operational staff in non-rostered shift positions to ensure continued operational preparedness to provide support during times of high operational demand and acknowledge that the physical resources in these units have operational (firefighting) capacity.

7. Maintain the span of control ratio as 5:1

8. That span of control for peak demand times be accounted for in TFS operational pre planning and training needs assessmentAppoint skilled and qualified Firecomm operators to all significant emergency incidents

9. Provide surge capacity in Firecomm by providing training opportunities to staff during the year to ensure there are a number of qualified staff to assist Firecomm when Firecomm operators are required at a significant incident

10. Clearly define staging areas as "Not for public access"

11. Provide adequate training for Staging Area Managers

12. Clearly define recovery areas for public access

13. Clearly outline the role and function on local government in recovery centre roles and practice processes for establishing recovery systems

14. That local council and other relevant agencies are integrated in the IMT system to coordinate recovery operations.

15. That the TFS review the effectiveness of the RFOC and SFOC systems and in particular ensure that;

    a. procedures for their integration in the official chain of command are implemented

    b. procedures for their integration into the whole of government emergency management process are implemented

    c. RFOC and SFOC process are fully integrated into AIIMS and IMT training programs and

    d. Remedial training programs are implemented for those currently qualified to operate in IMTs to ensure they understand the role of an RFOC or SFOC within the chain of command.

16. That the Minister for Police and Emergency Management take steps to ensure that the chain of command for operational response at incidents for which the TFS has an operational responsibility is recognised within the Fire Service Act 1979 and that that chain of command recognise the qualification of career firefighters as pivotal to effective outcomes.

17. That the Tasmanian State government recognise the effectiveness of the TFS communications network and infrastructure and abandon plans for downgrading services in order to support redundant systems in other sections of government.

18. Develop and implement a fatigue management policy for all aspects of staffing at an incident including travel

CLIMATE CHANGE; BUSHFIRE MITIGATION AND RESPONSE

Several recent reports, including the Australian Productivity Commission Inquiry Report into barrier to Effective Climate Change Adaptation (Commission, 2012) and the Antarctic Climate and eco Systems CRC technical reports on climate futures for Tasmania (White CJ, 2010), recognise the need for Australia to adapt to the onset of climate change. This report points to the need for Australian emergency managers to prepare for more frequent extreme weather events and the consequences of those events.

The reports state that Tasmania will experience more frequent hotter and dryer days. Specifically there will be a reduction in rainfall over the central and northwest regions of the state. In the UFUA's opinion these regions are already incapable of delivering all the firefighting services expected by our community in a safe and effective way. .

These reports also point to reduced run off from the central highlands which result in reduced access to water for firefighting and require increased expenditure on infrastructure to ensure water is available and can be transported to fires.

Increased bushfire activity is a logical consequence of those circumstances and the UFUA believes that the Tasmanian community must begin long term planning and build long term funding arrangements to enable emergency services to mitigate risk and improve response to the projected increase in emergencies.

As stated by Hon David O'Byrne MP, the Tasmanian Minister for Emergency Management in the forward of the 2010 Climate Futures for Tasmania report, "The Climate Futures for Tasmania research project is the key source of information for the Tasmanian Government's Climate Change Strategy and a number of the outputs from the project will have long‑term strategic implications for emergency management in Tasmania."

RECOMMENDATION FOR CLIMATE CHANGE ADAPTION

The UFUA recommends;

1. That the Tasmanian Government commit to the development of strategies that address the consequences of climate change in the Tasmanian emergency fire management context and commit to ongoing funds for those strategies.

> "Prescribed burning is one of the main tools for fire management on public land. It cannot prevent bushfire, but it decreases fuel loads and so reduces the spread and intensity of bushfires. By reducing the spread and intensity of bushfires, it also helps protect flora and fauna. Ironically, maintaining pristine forests untouched by fuel reduction can predispose those forests to greater destruction in the event of a bushfire."
>
> Victorian Bushfires Royal Commission 2010

The UFUA recognises this important observation provided by the 2010 Victorian Bushfires Royal Commission. The UFUA believes that, in light of the fact that approximately 80% of land burnt by the fires around Forcett and Dunalley were on private land, this is not just an issue for public land managers and private land owners have a shared responsibility for managing fire hazards.

With all management plans there is a risk and land tenure will in certain circumstance heighten the risk. The UFUA also recognises the need to protect rare and threatened species, the need to maintain an ecological balance and diversity for our environment, respect land holders individual's rights and the numerous other priorities that people in our state hold dear. These considerations should not impede the efficacy of mitigation strategies that seek to protect lives during bushfires.

To Quote the Tasmania Fire Service 2007 bushfire review paper (GDH, 2007), "The issue of bushfire mitigation works program adequacy is a perennial issue in all southeast Australian jurisdictions and is likely to always be so." The report further notes that hazard reduction is a year round activity and that the common practice of almost exclusively only burning close to high danger periods contributes to the failure of past hazard reduction plans

The State Fire Management Council (SFMC) is constituted under Section 14 of the Fire Service Act 1979. Its members are appointed by the Governor of Tasmania. They are: the Chief Officer of the Tasmania Fire Service and their nominee; the director of the Parks and Wildlife Service and their nominee; the Managing Director of Forestry Tasmania and their nominee plus one person each from the Local Government Association of Tasmania; the Tasmanian Farmers and Graziers Association and the Forest Industries Association of Tasmania. A chairperson, appointed by the Minister for Police and Emergency Services, presides.

The complete functions of the Council are described under Section 15 of the Fire Service Act 1979. The principal functions are: to develop a State vegetation fire management policy to be used as the basis for all fire management planning; to advise and report to the Minister on matters pertaining to the management of vegetation fire and to advise the State Fire Commission on matters relating to the prevention and mitigation of vegetation fire.

The united firefighters union believes that appointees to this and other subordinate committees (local fire area management committees) should be expanded or reconstituted to include individuals with recognised current qualifications and experience in fire management who can inform the committee's decision making and planning process at a direct "coal face" level and assist in presenting achievable bushfire hazard reduction plans.

Under the provisions of section 49 of the Fire Service Act 1979 Tas, Tasmania Fire Service has the capacity to implement fire management plans. Tasmania Fire Service also has a capacity to order councils to abate land owners to remove fire hazards.

The Tasmania Fire Service has, therefore, a legal capacity to conduct hazard reduction operations across multi tenured land. This capacity is directed by the valid, consultative and legislated planning process provided by the SFMC.

FUNDING FOR MITIGATION

The UFUA does not believe that the Tasmania Fire Service is appropriately funded through the Fire service levy to conduct this activity. As stated, the UFUA believes that Tasmania Fire Service is currently limited in resources and is unable to adequately conduct all operations in a safe and effective manner. The expectation that current resources could implement the required mitigation measures is unreasonable without further neglecting the current TFS responsibilities for urban fire suppression, road accident rescue, hazardous materials responses and all the other legislated responsibilities the TFS has. For this reason we support the current provision by the Tasmanian government of $400,000 to plan mitigation through the State Fire Management Council. This is consistent with the recommendations of the National Strategy for Disaster Resilience which recommend that "Risk assessments are undertaken for priority hazards and widely shared among at-risk communities, stakeholders and decision makers." This allocation of funding is only temporary and directed at planning. There is no funding provision for the implementation of those mitigation plans.

The idea that Tasmania should follow Victoria's lead and burn around 5% of publicly owned bushland to reduce fuel loads is an admirable but improperly directed goal. In 2011 the Tasmanian Fire Management Council estimated that such a prescribed burning target would cost approximately $25.7 million over 4 years. The Tasmanian community should expect this money to be spent in a coordinated manner in the areas most at risk, whether they are privately or publicly managed. Given that the Tasmanian bushfire environment is unlikely to change, this allocation of funds should not be a temporary mitigation measure but have an ongoing funding structure.

The use of public money for the mitigation of bushfire is justified and supported in fact. The provision of money to mitigation, according to insurance research by Suncorp (Suncorp, 2012) may have the capacity to reduce premiums by up to 70% in some areas. This report goes on to say that, due to the increase in natural disaster costs, insurance will become unaffordable, making the provision of mitigation strategies for natural disasters even more important. This report recommends that;

> "All three levels of government coordinate to investigate, design and fully fund a disaster mitigation program. A key part of this program should be progression of the shared responsibility approach including the development of strategies that encourage home owners to mitigate personal risks"

In the Tasmanian context we can see the use of public money for mitigation spent in effective and cost effective ways on projects like the levies around Longford in the states north. The Suncorp report further points to the cost effectiveness of mitigation due to the increased cost of claims, outlining in present and future dollar values of the dramatic increase in prices for rebuilding both of private and public infrastructure.

This is a view shared by the UFUA of Tasmania but it is imperative that the Tasmanian State Government, with a responsibility to a community living in one of the most bush fire prone areas of the world, lead action for bushfire mitigation.

RECOMMENDATIONS FOR BUSHFIRE MITIGATION STRATEGIES

The UFUA recommends;

1. That the SFMC provide plans to the TFS for state-wide strategies for bushfire mitigation for long term protection of the Tasmanian community.

2. That the Tasmania Fire Service immediately evaluate plans provided by the SFMC.

3. That TFS provide detailed resource needs based on those SFMC plans to the SFC and Tasmanian minister for polices and emergency management.

4. That the SFC and the Minister adjust the Fire Service levy with a view to provide additional specific funding for activities associated with planned burning and other mitigation strategies planned by fire management committees.

6 The establishment of a career crew with sufficient resources for;

   a. monitoring state-wide fuel loads

   b. planning fuel reduction burning state-wide

   c. implementing fuel reduction burning state-wide

7 The establishment of clear guidelines for fuel reduction burning on private property and the hazards remaining after a fuel reduction burn

8 Development of public information to increase awareness of fuel loads

9 That the membership of the State Fire Management Council and Local Fire Area Committees be expanded or reconstituted to include current operational firefighter with sound knowledge and experience in bushfire management and suppression.

TFS COMMUNITY PREVENTION AND PREPAREDNESS PROGRAMS

CURRENT AND PAST MARKETING STRATEGIES

The 2012-13 campaign was the first year of the *Know your risk* three year bushfire safety campaign. It was the third such campaign planned, implemented and evaluated by the TFS Community Education Unit.

TFS' first bushfire safety campaign was the *Bushfire: prepare to survive* DVD and social marketing campaign. It was launched for the 2006-07 bushfire season and ran for three seasons.

Evaluation of this campaign by TFS found that:

- Overall, the campaign was very effective. There was an increase in awareness of risk, preparation activities and intention to take appropriate action. The exception was people's intention to leave late.
- Levels of awareness and intention to act were maintained across the campaign.
- TV was the most effective medium for social marketing.
- Direct mailing strategies (DVD & preparation checklist) were effective.

Following the tragedy of the Victorian bushfires in February 2009, the TFS, the Australasian Fire and Emergency Service Authorities Council (AFAC) and fire services around Australia developed new policies, advice and strategies for community safety in the lead up to the 2009-10 bushfire season. These were based on the recommendations in the Interim Report of the 2009 Victorian Bushfires Royal Commission (released on 17th August 2009), and on a substantial body of research from the Bushfire Cooperative Research Centre. The *Prepare. Act. Survive.* campaign developed in 2009-10 was reviewed and updated for the 2010-11 and 2011-12 seasons. It incorporated recommendations from the Victorian Bushfires Royal Commission (interim report released on released on 17th August 2009 and final report released on 31st July 2010), the *2010 AFAC Position on Bushfires and Community Safety*, Bushfire CRC and agency research.

Consistent with Bushfire CRC and AFAC research, the evaluation of both the *Bushfire: prepare to survive* and *Prepare. Act. Survive.* campaigns found that the 'leaving early' (or 'not leaving too late') is not well understood by the community, and that many people still consider leaving late as a viable option.

- AFAC research has shown that leaving too late is the greatest risk to life
- This message itself is very complex. Fire services can define 'too late' to leave, but there is no consensus definition of 'leaving early', as it varies enormously. The difference between 'early' and 'too late' is influenced by a number of factors in combination e.g. direction of fire, speed of fire, slope, wind direction, visibility, number of exit roads, accessibility of roads (emergency vehicles, power lines, tree branches, fire, smoke etc.).

- It is a complex and difficult behaviour change goal. Research suggests that the primary target groups are those who are not adequately prepared for bushfire and either intend to stay and defend or intend to ‘wait and see’ and decide at the last minute. When the experience of the approaching fire front is so frightening and so much worse than they may have expected, they flee at the last minute. The required behaviour change includes planning and preparing for a low frequency event that may have low salience, making an advance decision based on accurate assessment of the household’s level of preparation (both physical and psychological), and taking action that runs contrary to ‘common sense’ (leaving when it is safe or not leaving when faced with a terrifying threat).

BUSHFIRE READY COMMUNITIES TASMANIA

Research conducted by the Bushfire CRC has shown that simply giving or distributing information about what to do is not enough for everyone in the community to prepare for hazards, particularly low frequency hazards such as bushfires. For many years the TFS has been providing high quality bushfire information, which has led to an increase in awareness of bushfire risk and intention to take appropriate action. However, there are still many households in Tasmania which are not prepared for bushfire.

The UFUA believe community development is a successful and cost-effective approach for changing behaviour, by accessing existing community networks and resources and supporting communities to develop specific local strategies. This approach is supported by national and international research from other areas including natural hazards management, health promotion and adult education.

The *Community Development Bushfire Preparedness* pilot project commenced in March 2009, soon after the Victorian Black Saturday bushfires on 7th February. When the pilot concluded in March 2011, there was a substantial body of new research, recommendations, policy and strategies. TFS received NDRP funding for two years to extend the pilot. *Bushfire Ready Communities Tasmania* trialled the implementation of policy and evidence-based interventions in selected communities in bushfire prone areas. They were based on both the initial findings from pilot of the *Community Development Bushfire Preparedness* project; and emerging bushfire safety research, recommendations, policy and strategies.

The extended pilot included:

- Developing the capacity of volunteer brigades to engage in community consultation and development;
- Trialling a range of evidence and practice-based community resilience building approaches;
- Disseminating and evaluating the impact of emerging bushfire safety advice to communities; and
- Facilitating community engagement with related TFS and inter-agency initiatives.

This community development pilot program from 2009 to 2013, conducted in collaboration with the Bushfire CRC and the University of Tasmania, has yielded a wealth of research and practice outcomes. Based on this, and existing and emerging research, TFS will implement a community development program in bushfire prone communities across Tasmania. In parallel with the development of community protection plans, this work will seek to increase the preparedness of these communities for bushfire as climate change is expected to deliver longer bushfire seasons and more intense bushfires. The UFUA strongly supports the continuation and ongoing funding of this program.

This implementation will commence in 2013-14 as the *Bushfire Ready Neighbourhoods Program*. This program is included in the five year SFC Forward Estimates period (2014-15 to 2016 -17) plan at a total cost of $2.8 million. A feature of the Bushfire Ready Neighbourhoods program will be to increase the capacity of some members of the career and volunteer brigades to work with communities to increase their resilience. The effectiveness of a community development approach hinges on collaboration with and empowerment of communities to share the responsibility for management of their bushfire risk. This is a more cost-effective, but also more labour-intensive approach than (for example) purchasing advertising space. It requires skilled community development practitioners to develop trust and ongoing positive working relationships with at-risk communities and key stakeholders.

RECOMMENDATIONS FOR BUSHFIRE PREPERATION AND PREPAREDNESS

Research indicates (Fransden, 2012) that developing community bushfire preparedness programs based on community engagement and empowerment principles result in more effective, sustainable and economical ways of delivering preparedness education to communities.

The UFUA recommends that:

- The TFS continues to fund, develop and implement effective community bushfire preparedness initiatives based on community engagement and empowerment principles
- The TFS fund research into what is required to understand the training, organisational and cultural-change needs required to adopt a community engagement approach
- The TFS continues to realise the potential of community engagement principles to foster community bushfire preparedness by ensuring that their volunteer fire brigades are provided with support and training to ensure the effective implementation and sustainment of these initiatives.
- The TFS increase the budget for community engagement activities above the current allocation to achieve these recommendations. At this time allocated funds are less than 6% of TFS budget.
- There is no dilution of existing resources or budget to Prevention and Preparedness Units such as removing staff and resources essential to service delivery.
- The TFS regularly evaluate the effectiveness of community engagement initiatives and amend them as necessary.

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