

The Australian

FIREFIGHTER

WA BRANCH CENTENNIAL CELEBRATIONS | PFC: CHEMICALS OF CONCERN
CALEB GEPPERT | POST TRAUMATIC STRESS AND FIREFIGHTING



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WA BRANCH CENTENNIAL CELEBRATIONS **24**

CONTENTS

- 2** **Contacts**
- 3** **Editorial**
- 6** **Branch News**
- 29** **Drowning Double Shock**
- 32** **PFC: Chemicals of Concern**
- 37** **Victorian Results Shock**
- 38** **Caleb Geppert**
- 40** **Post Traumatic Stress and Firefighting**



AVIATION BRANCH – LESSONS LEARNED **10**



NEIL MAHER – DROWNING DOUBLE SHOCK **29**



CALEB GEPPERT **38**



POST TRAUMATIC STRESS AND FIREFIGHTING **40**

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We welcome your contributions to The Australian Firefighter Magazine. Make it a letter, story, column, feature or even just an idea. Send us your photographs too, but make them a minimum of 120mm x 80mm at 300dpi. We like travel and workplace stories, as well as personal profiles. Email all to editor@ufunat.asn.au

Authorised by P Marshall
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National President
Greg Northcott



National Secretary
Peter Marshall

From the Secretary

The orchestrated CFA dispute in Victoria was all about politics and propaganda and union busting!

For months the Victorian media appeared to have nothing to do other than ramp up the propaganda about the proposed CFA UFU Operational Staff Agreement.

The previous CFA Board, CEO and Chief Officer have either been sacked or resigned amid a relentless partisan media campaign designed to label the UFU and career firefighters as thugs and bullies.

But even deeper treachery lies in a union-busting report.

It has recently been revealed that the former CFA Board and CEO Lucinda Nolan instructed internationally-renowned union-busting law firm Seyfarth Shaw to “review its existing workplace relations arrangements” with the UFU.

Our fire fighting comrades in North America are well aware of the union-busting techniques of Seyfarth Shaw and a quick internet search results in a long list of examples where the law firm has been advising public sector employers to publicly defeat unions by orchestrating disputes to prevent resolution of union-negotiated employment agreements. Seyfarth Shaw Australia have been used by Liberal/National coalition governments against unions and former Prime Minister Tony Abbott has reported he has received “discounted legal services”.

The Seyfarth Shaw Australia March report for the CFA was leaked to the media in September and reportedly contained “a slew of hardline measures” for the CFA to reduce the UFU’s influence in the workplace including employing firefighters on individual and non-union agreements.

That hardline strategy was clearly a union-busting strategy – the old divide and conquer strategy – preparing the way by attempting to distort and discredit the UFU and its members with the public vilification campaign.

Never before have we seen such an attack on the credibility and professionalism of firefighting.

In September former CFA CEO Lucinda Nolan claimed before a Victorian Parliamentary Inquiry that she resigned because she thought the proposed operational staff enterprise agreement was “destructive and divisive” and she “could not stay to oversee the destruction of the CFA”.

While disingenuously trying to paint a veneer of principle, the reality is that it was Ms Nolan and the former CFA Board who were



National Secretary Peter Marshall

relishing in a destructive and divisive campaign designed to vilify career firefighters as part of the union-busting strategy.

The anti-union machine was in over-drive with the orchestrated volunteer versus career firefighter campaign.

The partisan media drove the public campaign with over 27 front page stories that were very short on facts and long on anti-union rhetoric. Even when it was proven the outrageous claims had no foundation, they kept peddling the propaganda. In June alone there were 80 articles published by one newspaper.

And sections of the community bought it.

Career firefighters were spat on, subjected to road-rage, and confronted by angry members of the public at incidents.

Children of career firefighters were taunted and teased in the playground – excluded from play because their parent was a career firefighter.

One family was refused service in a country pub because one was wearing a UFU t-shirt.

But the most important victory has been in the never-wavering strength and unity of the UFU.

There has been an extensive, relentless campaign to vilify career firefighters and the UFU.

Throughout the ordeal career firefighters have maintained their dignity and professionalism.

They have continued to serve their communities and put the protection of life and property first and foremost.

The union has gone from the strength to strength with the support from the National Executive and National Committee of Management.

PETER MARSHALL ■
FEDERAL SECRETARY

Firefighters are five times more likely to suffer from musculoskeletal injuries than injuries caused by smoke or heat.*

You risk your life to help others, so if you've been injured you deserve to be looked after. You can call our free advice line and one of our specialist lawyers will tell you if you're entitled to compensation.

Proudly helping firefighters get the compensation they deserve. That's our speciality.

*Australian Family Physician, 2007.



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From the President

The Turnbull Government, and its allies in the Senate, have shown their true colours in attacking professional/career firefighters with the passing of the Fair Work Amendment (Respect for Emergency Services Volunteers) Act 2016.

The Bill was fast-tracked through a Senate Committee that was already laden with the anti-union legislation that had been used as the trigger for the double-dissolution of the Federal Parliament. The Senate Committee process was designed to limit any opportunity for a considered approach to the Bill which has wide-ranging implications for any industry that could be tagged as having anything to do with the emergency services sector even though the media focus was to stop the proposed UFU CFA Operational Staff Agreement.

The CFA dispute was an orchestrated political stunt with the Victorian Liberal Party registering a “Save the CFA” website for the campaign even before the Fair Work Commission had made its final recommendations and before the CFA Board had rejected the proposed CFA UFU Enterprise Agreement.

Fast forward a couple of months and Prime Minister Malcolm Turnbull promising to legislate to “protect volunteer firefighters” if re-elected. By this time the partisan media and anti-career firefighter scaremongering campaign was in full swing. Members of the public were caught up in the rhetoric and the “Save the CFA” website was an outlet to vent.

But few realised the “Save the CFA” website was part of a planned federal election machine by the Liberals. The website was a Trojan horse for soliciting funds for the Liberal Party in Victoria which needed a serious financial injection after former state director Damien Mantach pleaded guilty to siphoning a reported \$1.5 million from the party. Those that registered on the website were then contacted to see if they wanted to make a donation. Only the diligent would have scrolled down to see the website was run by the Liberal Party and was not an independent campaign site.

The Turnbull Government squeaked back in and the anti-union legislative agenda resumed with the UFU and career firefighters firmly in their sights.

All eyes were on the cross-bench but given the extraordinary truncated inquiry time there was only a limited window to get the real story across and to undo the damage of the relentless partisan media propaganda machine. National Secretary Peter Marshall took every opportunity to lobby those that would be making the decisions which included travelling to three states in one day to do so.



National President Greg Northcott

The UFU mounted an evidence-based campaign to background the proposed agreement demonstrating it was based on the findings of the Victorian Bushfires Royal Commission in 2009 and included the necessary safe systems of work.

The Senate Committee was provided with extensive legal advice warning of the vast consequences of the Bill including repeated and extensive litigation. An independent employment law expert succinctly summed up the Bill - that the only certainty was uncertainty.

But none of that mattered at the end of the day – most of the Senate cross-bench was only interested in the politics and not the substance.

This Bill was the first high profile test for the Senate cross-bench to show their independence and fight for a robust process to ensure just and necessary law, to stand up for fairness and justice.

This was their opportunity to refuse to be railroaded by a Liberal-National propaganda machine and to put the lives and safety of emergency service workers ahead of the politics.

But they didn't.

Only one of 11 cross-benchers – Tasmania Independent Jacqui Lambie – stood firm in her opinion, lambasting the Government for bringing a State matter before the Senate and cautioning of the constitutional implications that may follow.

All but one chose the line of least resistance – politics over people.

GREG NORTHCOTT ■
FEDERAL PRESIDENT

ACT United Firefighters Union – The ACT on Fire Campaign

Background – The Problem

In early 2016 the industrial front for ACT Fire and Rescue firefighters was looking increasingly grim. Understaffed, under-resourced and facing a reform agenda aimed at the 'integration' of the fire service into a broader agency, the ACT Branch of United Firefighters Union became increasingly concerned for the welfare of its members and their capacity to protect the people of Canberra.

Not enough firefighters

The firefighters themselves were stretched to the limit. Since 2006 the population of Canberra had increased by 55,000 but the number of firefighters per operational shift had only increased by two. This meant that overtime for the existing 330 firefighters had blown out to over 50,000 hours per year, a 100% increase on the year before.

Not enough equipment

ACT Fire and Rescue was dangerously under-equipped. While having the population of roughly the size of Geelong, Ballarat and Bendigo, which together have four aerial firefighting appliances, the ACT has just one and it was regularly off the road for maintenance. Further, the entire ACT Fire and Rescue has just one Hazmat and one Breathing Apparatus specialist vehicle, a fact that is considered ludicrous given the number of high profile strategic installations located in the nation's capital and the level of potential threat the public is often warned about.

Undermining the service

Worse, the organisational integrity of the ACT Fire and Rescue was consistently under attack. Firefighters were to be removed from the direction and control of training, with tailor-made training to be replaced with 'off the shelf' training, and firefighters were also due to be removed from the emergency command centre, where time and time again they had proven their value in talking members of the public through handling emergency situations and saving lives.

Finally, with the 2016/17 bushfire season fast approaching key operational command issues around the Bush Fire Abatement



Zone (determining where ACT Fire and Rescue could operate to eliminate emerging bushfire threats) had not been satisfactorily resolved.

ACT United Firefighters Union Secretary Greg McConville said: "We tried consistently to have these issues resolved through the standard processes. But repeated meetings with the Emergency Service Commissioner Dominic Lane, senior bureaucrats and politicians proved fruitless.

"We really had our backs to the wall. We knew that if we didn't take action right now, we'd have these changes forced upon us.

"With the ACT Election coming in October, we decided to launch a strong campaign aimed at generating public support that would persuade the politicians to finally pay attention to our issues."

ACT on Fire – Rescue Canberra's Future

Working closely with Essential Media Communications ACT UFU Secretary Greg McConville developed the campaign brand 'ACT on Fire: Rescue Canberra's Future', the purpose of which was to create a sense of concern and urgency but also hope, in the sense that decisive action now could save the future.

The Strategy

The campaign would also focus intensively on the experience of the 2003 Canberra Fires which destroyed over 500 homes, injured 490 people and cost four lives.

Mr McConville said "The campaign strategy that would be both comprehensive and relentless. Our aim was to create a campaign that attracted huge public support we could then use to convince ACT election candidates that it was in their best interests to support us.

"We took the decision early on not to dumb down the message, but instead to clearly explain to the public what we saw as the problem, and to back our argument up with strong facts and figures.

"We identified six key priorities for ACT Fire and Rescue including: more firefighters, proper equipment, not part time stations, a strong organisation, a strong plan and being ready for emerging threats."

The campaign would include free media, social media and ground campaign events which would be linked and cross promoted involving firefighters directly speaking to the public at shopping centres and community events.

"Each week, we would focus on a different theme and our media events, emails and

social media content would all be focused on telling that part of the story.”

Digitally the campaign included a website (www.actonfire.com.au) which sought to educate the public, sign them up to the campaign and encourage them to email every ACT election candidate asking them to support the firefighter’s six key priorities.

Social media, conducted through the UFU’s existing Facebook page and a related Firefighters ACT page provided an excellent hub to keep supporters involved, extend the reach of free media articles and encourage supporters to contact their candidates.

The Campaign

The ACT on Fire campaign was launched on August 24 with over 30 firefighters on Canberra’s Mt Stromlo, in front of the ruins of a telescope tragically devastated in the 2003 fires.

This would be a beginning of a strong free media campaign which produced over 10 separate stories in the Canberra Times and ABC online over eight weeks along with multiple television news stories and radio interviews.

The public response via social media was particularly strong and a key component in spreading the campaign message.

Senior Account Manager at Essential Media, Darren Rodrigo said: “Over the course of the campaign our Facebook posts were seen by over 150,000 people and our supporters sent an incredible 40,000 emails directly to ACT election candidates.

“Given the population of Canberra is just 350,000, that’s an extraordinary impact for a single issue campaign.

“One story on the debacle of the ACT Fire and Rescue being forced to borrow an unsuitable, unregistered Bronto from NASA was read by over 27,000 people alone.”

Mr McConville said that the ACT on Fire ground campaign culminated with over 150 firefighters marching on the ACT Parliament and taking a vote of ‘no confidence’ in ESA Commissioner Dominic Lane.

“By hitting ACT politicians and candidates in the newspapers, on TV news on Facebook and their inboxes we managed to create significant pressure for the ACT Government and election candidates.”

“Eventually, candidates begun to flock to support our campaign. I don’t think the ACT has ever seen anything like it.”

The Outcome – Success

Once the campaign had won public support and the major political parties came under increasing pressure to respond, the challenge was to translate public pressure into political commitments.

“Our goal was always to lock in a commitments from the ACT’s election candidates directly with a separate focus on the major parties. An important objective was to ensure that the next ACT Legislative Assembly contained candidates who directly engaged with and supported our issues.”

“Once you are under attack from the bureaucracy, as we were here, the only card you can play is to get support from the politicians, who ultimately direct the actions of the public service” Mr McConville said.

The Candidate Pledge

Candidates were invited to ‘pledge’ support to the ACT on Fire’s six key priorities and those who committed to them entirely were endorsed as ‘Fire Proof’ candidates. In the final phase of the campaign we went back to the communities we had campaigned in about our issues, and promoted candidates who had positively engaged with the campaign. We made good use of “Candidate Rankings” and “Parties’ scorecards”.

“Thanks to the public’s strong support we were able to lock in support from the highest polling minor parties including the Australian Sex Party, the Like Canberra Party and the ACT Greens.”

Our campaign successfully created a ‘bidding war’ as ACT candidates and political parties competed on delivering our six priorities.

“As a result of our campaign ACT Labor, who went on to win the election, committed to four of our six key priorities, including promising to recruit the necessary firefighters, acquire an aerial pumper and ruling out part time fire stations once and for all.”

At the end of vote counting a minority Labor Government was returned, importantly reliant on the votes of two Greens MLA’s both of whom had pledged to fully support our issues. We fell agonisingly short of achieving the election of another supportive candidate – Steven Bailey (Sex Party) in Brindabella – whose party achieved around 8% of the vote in that seat.

Lessons for the future

Mr McConville said that the ACT on Fire campaign demonstrated what can be achieved with a well-planned, well-timed and well-resourced campaign.

“Six months ago the ACT UFU was on the back foot, its members facing increasingly difficult working conditions, trying to do a dangerous job with inadequate resources and little say over how their fire service was run.”

“Now, not only have we got a commitment from the new ACT Barr Labor Government to four of our six key priorities, and the Greens cross bench fully committed to our issues, we now have the voice, strength and public support to make sure those commitments will be implemented.”

“The ACT UFU ran the largest, most high profile and effective single issue campaign one union in the ACT has probably ever run.”

“The next time our firefighters have something to say, you can guarantee the politicians in the ACT will be listening.”

Visit the campaign page www.actonfire.com.au or Firefighters ACT for more information.

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ARFFS Protecting Australia's Airports?

BY HENRY LAWRENCE

"Australia has an enviable record in aviation safety, among the best in the world, which has been built on a strong safety governance system, forged over many years."

- *Australia's Aviation State Safety Plan*
(Hon Darren Chester)

Is this really the case when it comes to ARFFS in Australia?

Unfortunately it's not and a simple comparison exercise with a world recognised standard like National Fire Protection Association (NFPA) National Fire Code (NFC) 403 shows just how poorly protected the 27 out of nearly 200 certified civilian airports in Australia with an ARFFS are. Not only is the current state of ARFFS barely compliant with minimum ICAO standards, the response to UFU members' legitimate safety concerns is to reduce these services even further.

The first thing to consider is that the International Civil Aviation Organisation (ICAO) provides guidance to ARFFS providers in the form of Annexes and Airport Services Manuals. These have International Standards and Recommended Practices for ARFFS providers. It also needs to be remembered that these standards, especially the standards on agent and discharge rate requirements, are the absolute minimums worked out by scientific methods and collation of actual crash data. These give you the Theoretical Critical Area (TCA) of a post-crash fire which provides ARFFS enough agent to create a fire free area around the fuselage to allow passengers to escape and firefighters to enter and initiate rescue.

Already based on old research of actual crash data the TCA is then reduced by a third to give us what is called the Practical Critical Area (PCA). The agent calculations are worked on providing enough agent to extinguish the fire in the critical area (Q1) and sufficient reserve agent to keep the fire out and prevent re-ignition (Q2) while ARFFS attempt rescue. It also provides for a discharge rate based on a critical application rate for fuel fed fires. As all firefighters know if you can't supply enough agent to overcome

the intense heat of a large fire it will not go out, it simply converts your water to steam and it disappears off into the atmosphere. Any foam you did use will then break down and the fire will grow back to its original size or greater. Basic fire science, for any firefighter.

So the ICAO standard only gives us two thirds of the absolute minimum figures required to be able to put out the external fires and keep them out. There is no extra agent for fighting internal fires. There is also no guarantee that only 2/3 of the critical area is on fire, given the massive fuel loads on modern large aircraft. This is why, unlike Australia, very few if any major airports in the world use these absolute minimum figures from ICAO to base their total agent capacity on. A brief study of any modern crashes, even in some where there was no fire involved, shows that ARFFS use three or four times the agent levels in the ICAO standard at a crash. Menchini (2003) stated in his computational fire modelling report: However, with New Large Aircraft (NLA) carrying larger amounts of fuel compared to the majority of commercial passenger carrying aircraft, NLA have the capacity to create a significantly larger accidental fire threat.

So at best Australia may have just enough agent to get the external fire out if they are lucky. There is no extra agent to fight internal fires and protect the persons trapped or incapacitated by the crash forces. So what is the current provider's solution? Reduce agent capacity and staffing even further and collude with the regulator to remove the ARFFS rescue function and rely solely on the cavalry arriving in the form of mutual aid.

It needs to be remembered by all the other



emergency services that the expectation of rescue workloads at a major crash scene won't change; it will simply transfer from the current user paid provider, to the State picking up the rescue costs for free. That is, save their costs and stick the State services with the rescue bill. Unless of course the survivors trapped inside are all dead by then, which is a much more likely scenario.

This is also in direct contravention of ICAO Annex 14 Ch 9.2: The rescue and firefighting service is provided to create and maintain survivable conditions, to provide egress routes for occupants and to initiate the rescue of those occupants unable to make their escape without direct aid. The rescue may require the use of equipment and personnel other than those assessed primarily for rescue and firefighting purposes.

The figures in the ICAO side of this table represent median figures. ICAO Annex 14 Standard 9.2.13 states: From 1 January 2015, at aerodromes where operations by aeroplanes larger than the average size in a given category are planned, the quantities of water shall be recalculated and the amount of water for foam production and the discharge rates for foam solution shall be increased accordingly. What this means in

Minimum Water Amount required by ARFFS:

NFPA	Non Fluorine Foam/ Max DR	ICAO	ICAO Foam Level B/ DR
Category 1	600 Litres at 600lpm	Category 1	230 litres at 230lpm
Category 2	1000 Litres at 787lpm	Category 2	670 Litres at 550lpm
Category 3	3050 Litres at 1500lpm	Category 3	1200 Litres at 900lpm
Category 4	6150 Litres at 2468lpm	Category 4	2400 Litres at 1800lpm
Category 5	12650 Litres at 4514lpm	Category 5	5400 Litres at 3000lpm
Category 6	17800 Litres at 6525lpm	Category 6	7900 Litres at 4000lpm
Category 7	23750 Litres at 8297lpm	Category 7	12100 Litres at 5300lpm
Category 8	37150 Litres at 10992lpm	Category 8	18200 Litres at 7200lpm
Category 9	46500 Litres at 13722lpm	Category 9	24300 Litres at 9000lpm
Category 10	67500 Litres at 16759lpm	Category 10	32300 Litres at 11200lpm

NFPA	Vehicles	Equipment	Staffing Min	ICAO	Vehicles	Equipment	Staffing
Cat 1	1		2+TRA	Cat 1	1		TRA*
Cat 2	1		2+TRA	Cat 2	1		TRA
Cat 3	1		2+TRA	Cat 3	1		TRA
Cat 4	1		3+TRA	Cat 4	1		TRA
Cat 5	2		6+TRA	Cat 5	1		TRA
Cat 6	2	1 HRET#	9+TRA	Cat 6	2		TRA
Cat 7	3	1 HRET	12+TRA	Cat 7	2		TRA
Cat 8	3	1 HRET	12+TRA	Cat 8	3		TRA
Cat 9	4	1 HRET	15+TRA	Cat 9	3		TRA
Cat 10	4	2 HRET	15+TRA	Cat 10	3		TRA

* Task Resource Analysis # High Reach Extendable Turret

practice is that ARFFS Cat 9 in this country provides 26,700 litres of water on three trucks for Category 9. The largest Category 9 aircraft in Australia in terms of critical area is the A340-600. It requires 26,506 Litres of water to meet ICAO regulations. (ARFFS barely makes it by less than 200 litres).

Really is that making 'safety the most important priority' as directed by the Minister?

Australia does not even bother to provide a civil ARFFS cover for nearly 162 Certified Aerodromes and 135 Registered Aerodromes, leaving around 297 Australian airports unprotected by any ARFFS.

The current threshold in place for the establishment of an ARFFS in Australia is already nearly twice the passenger figures of the only other country to use passenger figures for ARFFS regulations, which is Canada. Their figures are 180,000 passengers a year. Australia's figures are currently 350,000 passengers a year (958 pax per day) with the Department of Infrastructure and Regional Development (DIRD) with the full support of the current provider and regulator trying hard to push this up to 500,000 passengers. So around 1370 passengers a day before you even get considered for an ARFFS at your airport. As well as this they don't want 500,000 to be the only consideration either, it is just a benchmark for them to conduct a risk assessment on whether you need an ARFFS or not.

So that brings us to what is the risk? Aviation in Australia is safe isn't it? Our big planes never crash. The Australian Transport Safety Bureau (ATSB) report for the decade 2004-2014 states:

- The number of incidents reported to the ATSB involving VH- registered high capacity RPT has risen by around 56 per cent in the last 10 years.
- This is consistent with the increase in the rate of departures (52 per cent) over this time.
- For all Commercial Operations in Australia
 - Reportable Incidents: 2014 (4308) 2013 (4402) around 12 incidents every day.
 - Serious Incidents: 2014 (37) 2013 (54) 2012 (47) around one a week or one a fortnight.
 - Accidents: 2014 (27) 2013 (15) 2012 (14) 2011 (21) 2010 (23) around one a fortnight to one a month.

UK Research CAP 1036 tells us: The approach, landing and go-around phases accounted for 47% of all fatal accidents and 46% of all on board fatalities.

Take-off and climb accounted for a further 31% of the fatal accidents and 28% of the on board fatalities. These statistics show 78% of all crashes happen on or near the aerodrome.

On average, the fatal accident rate for turboprops was four times that for jets, based on flights flown, and nine times greater when using hours flown as the rate measure. Australia services most of our rural community airports with large turboprop aircraft and provide no ARFFS.

On average, the fatal accident rate for aircraft with Maximum Take-Off Weight Authorised (MTWA) below 15 tonnes was three times that for aircraft with MTWA above 27 tonnes, based on flights flown, and nine times greater when using hours

flown as the rate measure. Australia's secondary airports which are some of busiest airports in Australia with the added risk of trainee pilots have no ARFFS.

On average, the fatal accident rate for cargo flights was eight times greater than for passenger flights, based on flights flown, and seven times greater when using hours flown as the rate of measure. Cargo flights up to Boeing 747 size are not considered as requiring ARFFS in Australia.

If you are concerned by the abysmal state of ARFFS in Australia join the campaign at: 3 Minutes to Live.com

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- Canadian Aviation Regulations Subpart 3 Aircraft Rescue and Fire Fighting at Airports and Aerodromes. Division I General. Application 303.02 (1) (1996) Henry Lawrence is Secretary of the UFU Aviation Branch.

LESSONS LEARNED 1

Emirates Airlines B777-300 A6-EMW

Aug 3, 2016 08:37hrs
Dubai UAE flight EK 521

Preliminary report analysis

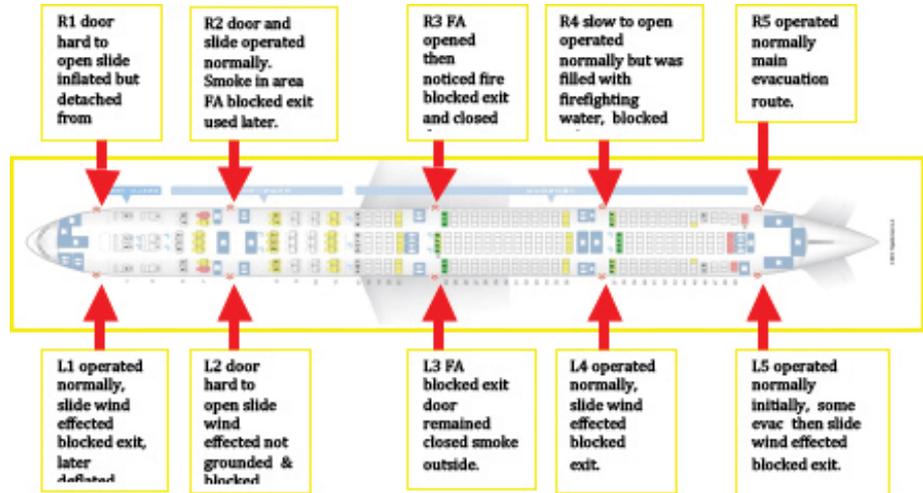
Crew on board: 18

Pax on board: 282

Total fatalities: 1 (ARFF)

- Aircraft attempted a go around after first ground contact on Dubai Runway 12L.
- Landing gear was retracted, touched down on the runway again and burst into flames.
- All occupants evacuated via slides.
- 13 passengers with injuries, 10 taken to hospitals, 3 treated at the airport.
- An ARFF firefighter lost his life.
- ARFFS Dubai is a Category 10 Airport with 3 fire stations and 9 vehicles.
- The Dubai AFS has a response time objective of 2 mins.
- There was an explosion of the aircraft's right wing, centre fuel tank, 9 mins after coming to rest.
- A 15 m section of wing was blown into the air.
- This explosion was the cause of the 'line of duty death' of the ARFF firefighter and injured another.
- There were 8 other ARFF firefighters transported to hospitals and airport medical centres with heat stroke.
- In Australia those 10 staff would be an entire Cat 9 ARFF crew dead or disabled.
- Passengers trying to retrieve carry-on baggage from overhead lockers impeded the evacuation.
- Several cabin crew members' seats were damaged or failed.
- Aircraft crashed at 08:37:38, ARFFS observed crash, ATC crash alert message received 08:38:10.
- Fire Commander was first on scene at 08:39. (1min 22secs)
- Major Attack Vehicles commenced deploying agent at 08:39:36. (1min 58secs)

The above diagram shows the slide failures that this new, modern, state of the art 'safe' aircraft suffered in the crash. Only one slide out 10 actually operated to full effect.



So what do UFU members learn from this?

1. Category 10 is provided for each runway in Dubai, this is a great lesson for Sydney right now, and for Melbourne and Brisbane ARFF when they have their parallel runways operating.
2. When you position your fire stations correctly based on optimum response times rather than minimising costs you can meet the ICAO two-minute response objective.
3. In Australia, an aircraft this size (Category 9) landing at either Cairns, Darwin, or Coolangatta would only be covered by a token Category 8 with only two officers and six firefighters, thanks to using remission.
4. Dubai ARFFS turned out in less than 2 minutes with three Category 10 fire stations (100,000 litres of agent), with vehicles equipped with HRET technology and by the look of what's left they struggled to control the post-crash fire.
5. Our current CFO agreed completely with ARFF in Australia not having enough agent compared to safety focussed International ARFF providers. He ensured it was written into the Fire Vehicle Replacement FVR5 project strategy and discussed it in full with that committee.
6. This same CFO just reduced staffing in Perth and wants to do the same in Brisbane.
7. The same CFO that endorsed a proposal to introduce full remission to Category 9 for both Perth and Brisbane, despite having acknowledged to the FVR5 committee that ARFF here was already unsafe compared to the rest of the world at category 10.
8. The same CFO that endorsed the remission proposal stating that both models were acceptable despite one of them being clearly in breach of ICAO standards.
9. When it's hot, firefighters working hard in PPE tend to fall down in this case eight firefighters fell down with heat stress.
10. ARFF here learnt this at the Darwin Embraer crash which was only category 5 and yet stretched a category 8 station to the limits.
11. ARFF introduced rehabilitation equipment. It is sitting in a box or in the shed at the back of the fire station with no spare staff to access it during a full response.
12. Modern state of the art 'SAFE' aircraft with great safety records, owned by great companies and serviced properly by skilled engineers, still crash.
13. These same aircraft still crash at state of the art airports with all the modern safety equipment and navigation aids.
14. Even at airports that have great weather conditions for most of the year.
15. Using Monitors and Bumper Monitors around slides instead of foam branches can render slides inoperative.

LESSONS LEARNED 2

Asiana Flt 214 B777-200

Jul 6, 2013 at 11:27hrs
San Francisco

Preliminary report analysis

Crew on board: 16

Pax on board: 291

Total fatalities: 3

- Final approach to San Francisco airport, the Aircraft struck a sea wall, 115m short of runway 28L
- On impact, empennage was sheared off, aircraft lost both engines and the undercarriage.
- Aircraft came to rest after 490m on the left side of runway, a severe post-crash fire developed.
- Two passengers were pronounced dead on scene, 132 others were injured, 175 people were uninjured
- Aircraft was destroyed by impact forces and the post impact fire.
- A passenger who was in critical condition died six days later making a total of 3 fatalities

The NTSB accident report Findings contain significant lessons for ARFF providers.

Remember while you read this: In Australia ARFF Category 9 is (2+8) ARFF Category 9 Remission cover is (2+6)

ARFF Category 9 is only 3 Foam Trucks with a total of 26,700L.

NTSB Findings of Note to ARFFS

1. Aircraft rescue and firefighting (ARFF) training for officers placed in command of an aircraft accident.

The arriving incident commander placed an officer in charge of the fire attack who had not received ARFF training, and this individual made decisions that reflected his lack of ARFF training.

Although no additional injuries or loss of life could be attributed to the fire attack supervisor's lack of ARFF training, it demonstrates the potential strategic and tactical challenges associated with having non-ARFF trained personnel in positions of command at an airplane accident.

2. Guidance on when to pierce the fuselage of a burning airplane with a skin-piercing nozzle.

The airport's fire department had two vehicles equipped with high-reach extendable turrets (HRETs) that were not



used to the best of their capabilities in the initial attack.

This was partially the result of departmental guidance that discouraged penetration of the fuselage using the skin-piercing nozzles on the HRETs until all of the occupants were known to have evacuated the airplane.

Current FAA guidance provides information on how to pierce but does not include any guidance on when to pierce.

3. Integration of the medical supply buses at SFO into the airport's preparation drills.

Although the airport's emergency procedures manual called for airport operations personnel to deliver the airport's two emergency medical buses to the accident site, neither of the medical buses arrived.

Further, the monthly emergency drills conducted by the airport did not include deployment of the buses either as a matter of routine or as part of the unique scenario being evaluated.

This lack of integration of the medical buses into the airport's preparation drills likely played a part in their lack of use in the initial response to the accident.

4. Guidance or protocols for ensuring the safety of passengers and crew at risk of being struck or rolled over by a vehicle during ARFF operations.

In this case, only one passenger was at significant risk for a vehicle strike due to her close proximity to the burning airplane; however, there are other accident scenarios in which many injured or deceased persons could be located near an accident airplane.

There is currently no guidance or any recommended protocols for ensuring the

safety of passengers and crew at risk of being struck or rolled over by a vehicle during ARFF operations.

5. Requirements for ARFF staffing. Seven ARFF vehicles and 23 ARFF personnel from SFO's airport fire department were involved in the initial response to the accident.

This equipment level exceeded the FAA-required minimum of three vehicles, and there is currently no FAA-required minimum staffing level.

Because of the amount of available ARFF vehicles and personnel, the airport firefighters were able to perform exterior firefighting and send firefighters into the airplane who rescued five passengers that were unable to self-evacuate amid rapidly deteriorating cabin conditions.

Due to the lack of an FAA-required minimum staffing level, passengers involved in an aviation accident at a smaller airport may not be afforded the same level of protection that the passengers of flight 214 had.

Remember: Australia uses cat 9 remission (2+6) Darwin, Cairns and Coolangatta Cat 8

So what do UFU members learn from this?

1. Firstly most of you would remember that when this accident occurred our CFO released an SOP on walking through foam blankets so ARFFS vehicles do not run over casualties hidden by foam. This was based on this accident report and the NTSB findings. What happened to the other NTSB findings?

continued on page 12

continued from page 11

2. So when questioned about how does ARFF maintain Command and Control of the combat area of a B-777 or B-747 crash at Cairns, Darwin, or Coolangatta with only two officers some of you may have heard our senior managers state they would have to rely on the arriving services? Wouldn't that be even worse than relying on an Urban Fire Officer from a combined department/airport service with no ARFF training?
3. One that would be dear to Brisbane members' hearts, how often do you include the QFES Aerial in your regular training? How many current Brisbane members have actually gone up in the QFES Aerial basket with a charged hose and a CABA on? Ever tried to open an aircraft door from the basket? You know where the emergency stops are or if they even have one? Do you know how to get down again if the pedestal operator gets incapacitated or leaves?
4. HRET how many incidents do you see these days where HRET is the only way they can control the internal fires and make rescue operations safe? Why doesn't ARFF in Australia have any defensive operations at all for aviation? Can you punch out the plug type windows with a sledge hammer like the FAA teach? Those three FD20 fire drills all live in the back sheds at Melbourne, Brisbane and Cairns. Melbourne even has an old trial manual driven spike type branch that sits up in the FCC storeroom. The FVR5 project was supposed to address some of these concerns but was scrapped because passengers and our firefighters' safety is just too expensive for Airservices.
5. Three ARFF stations here in Australia are expected to respond a job like this with 2+6 and only three trucks (Remission).
6. Australia provides no HRETs at all, and no Q3 agent to maintain internal firefighting operations.
7. ARFF Management want you to let a police sergeant or Brigade SO run this incident from the FCP with no communications plan or link to the FCP until the ARFF Ops Manager shows up, if they are even available. (90min response times, up to 12 days with no replacement)
8. This incident clearly shows that if you do a proper TRA and have justified staffing levels you can make rapid internal entry and save five people's lives or even more.
9. Here in Australia those five people would have died as 2+6 simply won't allow for an effective and safe ARFF intervention.
10. It is paramount that the safety message the UFU is trying to communicate to government is acknowledged and acted on before a crash like this occurs at one of our under resourced airports and our members are injured or killed trying do the impossible with insufficient equipment, agent, staffing and vehicles.

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LESSONS LEARNED 3

British Airways B777-200 (BA038)

Jan 17, 2008 (12:42hrs)

Heathrow London UK

Crew on board: 16

Pax on board: 136

Total fatalities: 0

On approach to Heathrow

- At 720ft AGL Aircraft lost power to both engines, landed 300m short RNWY 27L, undercarriage collapsed, both engines badly damaged
- 49 passengers and crew injured
- Fuel spills and oxygen leaks presented significant fire risk.
- Ice had formed in the fuel system from water naturally occurring in the fuel.
- Accreted Ice had released from the system causing a blockage in the fuel oil heat exchanger (FOHE).
- Systems were all compliant with the current regulations. The risk of fuel icing blocking the FOHE had just not yet been identified as a risk.

Significant findings for ARFFS

- The cabin crew were not briefed of the situation before the crash. (12:42) There was no 'Brace-Brace' message given.
- Some passengers immediately stood up to evacuate and were told to get back in their seats by cabin crew. (51 secs delay approx.)
- Delay due to pilot initially using the VHF radio instead for evacuation call, then the PA announcement was made: 'Emergency: Evacuate-Evacuate'.
- Doors opened (12:42:51) Slides were in use from (12:43:07) All clear of the fuselage given at (12:45:11)
- Some passengers took personal items with them as they evacuated, one man actually climbed back up the (4L) slide to retrieve his belongings, when he saw others outside with theirs.
- ARFFS response time was 1 min 43 secs.
- There was no fire, but fuel was seen spilling from the hot engines, and oxygen was heard to be leaking from the oxygen cylinders. Spar valves providing fuel to the engines remained open (> 6750L leak)
- This caused fuel to leak out into the hot engines to create a severe fire risk and



- the Airport Fire Service (AFS) deployed foam and water media, in stages.
- As the right centre fuel tank was ruptured, the AFS also pumped foam directly into the opening to reduce the risk of fire from residual fuel in the tank. Spar valves had to be closed manually.
 - In total 300,000 litres of water and 17,000 litres of Film-Forming Fluoro Protein (FFFP) foam were used.
 - There was one serious injury: a passenger seated in seat 30K sustained a fracture of his right leg caused by the displacement of the right main landing gear.
 - Thirty-four of the passengers reported minor injuries, principally to their neck or back.
 - Twelve of the 13 cabin crew members (CCMs) suffered minor injuries, again, principally to their back or neck. Of these, eight reported that they were still suffering various degrees of discomfort 18 months later.

So what do UFU members learn from this?

1. Category 9 aircraft in Australia may be covered by 2+6 crewing thanks to remission.
2. Heathrow ARFF/AFS are acknowledged as world class operators and they used more than 12 times the amount of agent we carry for category 9, and it wasn't even on fire.
3. 12 of the 13 cabin crew who we rely on heavily to assist with the evacuation and control of the evacuees were injured. It states minor but then discredits that by stating 18 months later there were still effects of their injuries present.

4. 2+6 to manage a category 9 aircraft with multiple risks and assist 49 injured persons and control a total of 152 pob wandering around the movement area and fireground.
5. A perfectly good, well maintained aircraft, flown by top grade pilots, for a top of the line airline company, flying into a state of the art airport, crashes due to a technical fault that was not picked up in the design by a world class manufacturer, Boeing.
6. UFU members would do well to remember these facts when Airservices tries to slip things like it's a safe aircraft into operational risk assessments.
7. Remember if you let them put rubbish in a risk assessment then it's only going to be rubbish coming out.
8. Do you know what a spar valve is?
9. Do you know how to shut one off?
10. Do you have an engineer coming to your AEPs and detailed to attend the FCP in a real incident?
11. In some of our remote areas that engineering person is probably an imaginary friend.
12. What's your plan B?
13. Have you timed how long it takes to fill your Mk8? (@30lps 4.9 mins in theory, 8 mins in reality) Plus your travel time, in this case 11 to 12 trips.
14. Good luck out there.

HAVE YOU CONSIDERED ALL THE RISKS?



Emergency services personnel are regularly tasked with putting themselves into situations that most would shy away from. They need to rely on training and equipment to ensure their safety allowing them to effectively do what is required. There is always an element of unknown risk involved.

Modern PPE is designed with two primary purposes. First it must allow the wearer to carry out tasks unencumbered and as comfortable as possible. Let's call this the comfort factor. Second, and perhaps most importantly, it must protect the wearer from worst case scenarios. Let's call this the safety factor. These are two very important distinctions as both have a direct impact on the other.

The comfort factor includes elements such as weight, balance, breathability and ease of use. These are important as a helmet may need to be worn for extended periods of time. It is essential that the wearer does not feel the need to take the helmet off and that it does not impede their functions or contribute unnecessarily to wearer fatigue.

The safety factor protects the wearer when things go wrong allowing survival and escape in worst case scenarios. Extensive research goes into attempting to predict the risks faced when things go wrong. The industry then sets the Standards that manufacturers must design their equipment around in order to protect the wearer.

Different tasks present different levels of risk. The main risks associated with wildland firefighting are considered to be impact, flame and heat. Wildland helmets are therefore designed to perform against such risk. For structural firefighting, the potential level of heat and impact is considered far greater than wildland thus the Standards require structural helmets to be tested to a much higher level. Determining such levels of risk is the result of industry research and expertise. For example, does the industry determine if side protection is required? Is this unique deceleration protection essential? Certainly, in this part of the world the Standards suggest this is a risk worth protecting against.

The AS/NZS Standards are as stringent as and exceed any Standards in the world. These Standards set the absolute minimum requirement. Equipment should be designed to go as far as possible in terms of protection. It should not be enough to say something simply meets a standard. This is after all, people's lives at stake – your lives.

Pacific Helmets NZ and Pac Fire Australia have always aimed to go well beyond the level of safety required in the standard. To ensure this, we work closely with Australasian brigades to make sure helmets are exactly fit for purpose – Australasian purpose. The reason we make so many different models of helmets is simply because that is what our industry asks of us.



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The **NEW** super compact F11 combines the features of a jet and conventional style, while providing unsurpassed safety, strength and comfort across structural firefighting and technical rescue applications. Compatible with Pac Fire's ear protection.



F15 & F11 Certification

Structural Firefighting AS/NZS 4067:2012, EN443:2008 and NFPA 1971:2013. Technical Rescue NFPA 1951:2013. Eyewear EN166:2001, AS/NZS 1337:2010, and ANSI Z87.1:2015 (NFPA 1971:2013).

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AVIATION BRANCH

UFU LESSONS LEARNED

US Airways Airbus A320-214 (Fit 1549)

Jan 15, 2009 (15:26hrs)

Hudson River, New York

Crew on board: 5

Pax on board: 150

Total fatalities: 0

- On departure from La Guardia Airport collided with a flock of large birds lost and power to both engines.
- Ditched Hudson River water temp: 6° C & Air temp: -6°C Hypothermia risk extreme.
- There was nothing wrong with the aircraft. The mechanism that forced this aircraft to ditch was directly attributable to the size and number of birds ingested, which exceeded the FAA's current bird-ingestion standard. So again, similar to Lessons Learned 3 this aircraft was compliant with all the rules but crashed anyway.
- There were five passengers and crew seriously injured and 95 passengers suffered minor injuries.
- The decision to ditch on the Hudson River provided the highest probability that the accident would be survivable.
- The FAA-recommended brace position might have contributed to the shoulder fractures of two passengers.
- Both engines were operating normally until they each ingested at least two large birds (weighing about 8 pounds each) causing mechanical damage that prevented the engines from being able to provide sufficient thrust to sustain flight.

NTSB Findings of Note to ARFF:

- The emergency response was timely and efficient because of the proximity of the emergency responders to the accident site, their immediate response to the accident, and their training before the accident.
- The structural damage and leakage sustained during a ditching included significant aft fuselage breaching and subsequent water entry into the aft area of the airplane, which prevented the aft slide/rafts from being available for use during an evacuation.
- Equipping all aircraft with flotation seat cushions and life vests regardless of the route, will provide passengers the benefits of water buoyancy and stability in the event of a ditching.



- Briefing and demonstrating the use of, all flotation equipment installed on an airplane on all flights will improve the chances that it will be effectively used during an accident involving water.
- Passenger behaviour indicates that most passengers will not wait 7 to 8 seconds (average life vest retrieval time) before abandoning the retrieval attempt and evacuating without a life vest.
- The current life vest design standards do not ensure that passengers can quickly or correctly don life vests.
- The forward slide/rafts, contributed to the lack of fatalities and serious cold-water immersion-related injuries, 64 occupants used the forward slide/rafts after the ditching. (Not required under Regs)
- ARFFS Australia only provides rafts for 50% of pax.

So, what can UFU members learn from this?

1. How much real quality training do you do in your Water Rescue Boats?
2. How quick are your response times and who has heard senior managers say there is no response time for WRS? Really!
3. How often do you practise rapid deployment of your WRS vessels and rescuing persons in the water?
4. How many of you have even physically deployed an ARP20? Or better yet dragged someone into a raft from the water?

5. What is your plan to rescue any seriously injured persons?
6. Civil Aviation Order 20.11 requires life jackets for all on board at a distance over water greater than 50 miles for multi engine aircraft.
7. Civil Aviation Order 20.11 requires flotation devices to be carried with space for all on board for flight over water greater than 120 mins or 400 miles.
8. In this incident, we learned that MOST passengers will abandon the life vests if it takes longer than 7-8 secs to retrieve them.
9. We also learned that the rear slides/rafts were inoperable thanks to hull breaching and flooding.
10. In 1912 the Titanic sunk with only enough life boat capacity for 52% of the persons on board.
11. Aircraft in Australia taking off from Sydney or Brisbane for example may take off over water then turn and go inland. (Not required to carry Life Rafts)
12. ARFFs carry only enough rafts for 50% of the largest aircrafts POB. (Titanic?)

UFU AVIATION BRANCH

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Firefighters Remembrance Day

Every October 10, Queenslanders take time out of their day to reflect on the important work performed by firefighters in protecting the community.

This year we paused to remember the 51 Queensland firefighters who have lost their lives while on duty, and to pay our respects to the retired firefighters we have lost in the past year.

The UFUQ State Committee of Management joined representatives of the state government and fire service to pay our respects at St Brigid's Church in Red Hill.



Firefighters Remembrance Day

Smoke alarm legislation

Smoke alarm law reform has been a big political issue this year in Queensland, with both parties introducing bills to strengthen the existing standards for fire safety in domestic dwellings. As a result, from August this year our State's fire safety standards are the strongest in Australia.

Within 10 years, all domestic dwellings will have a photoelectric smoke alarm installed in every bedroom, with at least one on every floor.

These smoke alarms will be either hardwired or linked to an enduring battery source, and they will be interconnected to detonate simultaneously.

The UFUQ made a submission to the parliamentary committee charged with considering these bills. We advised that time is everything when responding to an incident. If we are called to an incident even a few minutes earlier, our exposure is significantly reduced and anyone inside is given a much better chance of getting out unharmed.

On behalf of our members, we expressed strong support for this commitment to fire safety.

Communications Centre closures

We have suspected for quite a while that some within QFES management hold a secret desire to significantly restructure our current Fire Communications operations.

The plan under the previous government was to decommission all but two centres, and despite the change in government and policy, it would seem that some individuals within QFES can't seem to let that idea go.

On 21 June this year, an email was sent to all FireCom staff advising of a planned restructure to communications locations and the development of a minimum staffing model to support GWN operations. This secret plan had clearly been months in the making, and there had been absolutely no attempt to consult with Fire Communications Officers or with the UFUQ.

The UFUQ state office responded to this information immediately. We sent a code 2 to all members and organised urgent meetings at all affected communications centres. We also contacted QFES and the Minister for the Fire and Emergency Services demanding meetings and an explanation.

Within a week, the secret plan had been suspended, and within two weeks, the Minister and the Commissioner both publically confirmed that the closure of communications centres was out of the question.

The state office was assisted greatly by the background information provided by fire communications members across all seven regions. We were able to uncover the details of the plan and identify those behind it, which helped us obtain such a positive result.

Award Modernisation

Thankfully, the process of modernising the Queensland awards has now come to an end, and UFUQ are happy with the overall outcome.

Queensland retained industrial relations coverage of state and local government workers and the previous state government commenced a process of 'award modernisation' in 2013 which was, in part, a harmonisation with federal modern awards.

More controversially, the QIRC was initially directed by the state government of the time to strip back all awards and remove anything the government considered to be "non-permissible content". Thankfully, the new state government changed this process considerably to allow any content agreed by the employer and the relevant union, and to allow more time for the parties to prepare.

Officially, the award modernisation process was not supposed to add or remove any entitlements that already exist, only to restructure the content to mirror the federal modern awards.

Our award is a powerful instrument, and all parties attempted to push their own agendas to some extent. UFUQ frequently attended meetings in the first half of this year, with QFES, the SOU and the Together Union. The other unions agreed with our plan, and QFES also consented to the UFUQ position.

Considering that the process had the potential to result in a very poor outcome, we are pleased that we managed to retain all our current conditions and to exclude the adverse changes included by the QIRC in some of the other modern awards.

All QFES permanent employees will now be covered by a single modern award named the *Queensland Fire and Emergency Services Employees Award – State 2016*.

On 28 August 2016, the UFUQ, along with QFES, the SOU and the Together Union, presented a consent position document to the Industrial Relations Commission for approval. The new award will commence at the same time as the next Certified Agreement.

UFUA QUEENSLAND BRANCH

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Enterprise Bargaining: the 2016 saga

Alleged failure by the TFS to bargain in good faith with the UFUA

The Tasmania Branch of the UFUA

developed a bargaining claim during the first quarter of 2016. The Branch advised the TFS of the fact we were ready to meet and commence bargaining on April 26 2016. The first meeting was held on May 20. The second meeting was scheduled by the TFS on September 16, but only after the UFUA notified an industrial dispute with the Tasmanian Industrial Commission. At this meeting TFS advised of the Government position on wages, i.e. 2% total wages outcome for any considerations arising from this agreement and any outcomes arising from commitments made in previous agreements. TFS also advise they will not negotiate on three key matters of UFUA claim (Wellness Programme, Firefighter numbers and Superannuation). The TFS also advise they will not be keeping minutes of any bargaining meetings as the meetings are held on a “without prejudice” basis. The TFS added that they wanted Senior Management to meet directly with UFUA members to validate key items TFS wish to negotiate for this bargain.

The TFS advised that a large number of UFUA matters were dismissed by the TFS as not to be negotiated matters as not an industrial matter as per the Industrial Relations Act 1984.

TFS advised have conducted research on UFUA claim. Nature of research not revealed. TFS advised they have undertaken costings on UFUA claim. Costings not provided.

TFS advised the UFUA that Deputy Secretary DPFEM, is developing a “Wellness Programme” for the whole of the Department and was happy to provide UFUA Branch Secretary with update on progress. UFUA noted the programme being developed for whole Department was not specifically for Firefighters who are the only people in the Department who have presumptive cancer legislation. The UFUA wanted to jointly develop a policy for firefighters based on the Edmonton Model.

TFS will discuss manning and other matters in other forums but not at the

bargaining table. Other UFUA matters were discussed briefly but no progress made on any item. The UFUA advised it was not happy with the TFS response especially about direct negotiations tactics proposed.

The UFUA conducted a round of general meetings to discuss the TFS response and to provide an update on the EBA process and lack of any significant progress with bargaining outcomes.

A hearing in the Tasmanian Industrial Commission requested by the UFUA resulted in the TFS sending to UFUA a copy of minutes of EBA meeting of September 16 and included a modified proposal that the TFS will negotiate on non-industrial matters. TFS to obtain copy of Government wages policy.

At the third meeting on September 30 the TFS canned the meeting after about three minutes due to a UFUA motion arising from a general meeting where members advised they would boycott TFS bargaining meetings of Senior Management and requested TFS respect their wishes and negotiate with UFUA bargaining team. TFS consider the motion constituted a dispute and refused to bargain whilst the parties were in dispute.

The offensive motion:

“Having heard the report from the Branch Secretary on enterprise bargaining this meeting of UFUA members resolves to: Boycott any bargaining meetings to be arranged by the TFS, for senior management to meet directly with UFUA members.

UFUA members have endorsed a bargaining committee to negotiate on their behalf.

UFUA members do not support direct negotiations with management outside the long established and endorsed process adopted for this and previous bargaining negotiations.

UFUA members request TFS respect this view and continue to negotiate with the UFUA elected representatives on the EBA Committee”

Following a BCOM meeting the UFUA agree to meet again with the TFS despite the TFS dispute with the UFUA not being resolved. UFUA received a copy of the TFS strategy for the bargaining meeting as an attachment to the meeting invitation for that day. A fourth meeting was held on October 10.

TFS advised at the meeting that alternative arrangements for direct employee (UFUA members) feedback are in place and working. No advice of feedback received was provided to the UFUA.

An email from the Chief Officer to members, not the UFUA office, advised of three matters for consideration, cashing out annual leave, Interstate International Deployment and 1AM procedures. No advice was provided to the UFUA that TFS intended to send these emails and also the TFS had developed a video for broadcast, on the TFS intranet, as part of the TFS EBA communications strategy.

UFUA sought clarification on the process undertaken by TFS. Also why TFS broadcast UFUA/TFS specific information on the broader TFS intranet allowing for parties not directly involved in the bargaining process to have access to and be informed of matters between the TFS/UFUA. The meeting resulted in the UFUA requesting a further hearing in the Industrial Commission.

UFUA issues requiring resolution

- Regional Chief/Deputy Regional Chief - Vacancy and terms and conditions of employment to be included in firefighting award
- Prevention and Preparedness - terms and conditions of employment to be included in firefighting award
- BA Techs - terms and conditions of employment to be included in firefighting award
- Work Value case as agreed in EBA
- Award modernisation as agreed in EBA
- Lateral Entry as agreed in EBA
- Uniform and Protective Clothing as agreed in EBA
- TFE agreement finalisation of previous agreement provisions and terms and conditions of employment to be included in firefighting award

Four main issues for this EBA

- Wellness programme
- Superannuation equity
- Minimum manning
- Wages outcome

Assistance of the Tasmanian Industrial Commission

The UFA sought assistance from the TIC with regard to the following:

Monitor Bargaining Process directly, assisting to restore the loss of faith in TFS bargaining committee and the bargaining process the TFS are deploying for this bargain. "Loss of Faith" because of UFUA view there has been an alleged "Breach" of the following:

- Firefighters Agreement
 - TFS Values
 - State Service Code of Conduct
- UFUA also advised the Commission that the Branch is inclined to make application to the TIC to have all outstanding matters resolved including;
- Work Value
 - Superannuation equity
 - Wellness programme
 - RC/DRC - terms, conditions classifications and rates of pay by award variation
 - Prevention and preparedness - terms, conditions classifications and rates of pay by award variation
 - BA Techs - terms, conditions classifications and rates of pay by award variation
 - TFE outstanding matters by award variation
 - Award modernisation by variation
 - Lateral entry
 - Uniform and protective clothing

Parliamentary Inquiry into the State Fire Commission

The Tasmanian Parliament resolved to hold the following Inquiry after representations by the UFUA to the ALP State Leader of the PLP.

Inquiry into the State Fire Commission

The House of Assembly has referred an inquiry to the Standing Committee on Community Development with the following Terms of reference:

- 1.** *The House refers the following matters to the Standing Committee on Community Development to inquire into and report upon:*
- a.** *the 2014-15 and 2015-16 budget for the State Fire Commission - SFC - and its implications for the Tasmania Fire Service - TFS - including:*

- ii. *the transfer of the State Emergency Service – SES reporting responsibility to the SFC/TFS;*
 - iii. *the funding of the SES;*
 - iv. *the structures of the Department of Police and Emergency Management - DPEM;*
 - v. *the DPEM corporate services review, including the scope and conduct of the review and its implications;*
 - vi. *the funding of the Fuel Reduction Burn Program;*
 - vii. *community safety programs;*
 - viii. *fire service resources including firefighter numbers;*
 - ix. *the protection of the community.*
- b.** *the budget history of the State Fire Commission from 2008-09 to present;*
 - c.** *the future funding arrangements for TFS and SES;*
 - d.** *the need for appropriate and modern governance practices in the State Fire Commission; and*
 - e.** *other matters incidental thereto.*
- 2.** *The committee report by 15 April next.*
- The Committee has advertised generally for submissions from interested persons and organisations. Accordingly, you are invited to provide the Committee with any information you deem to be relevant to the Terms of Reference.

The Tasmania Branch with the assistance of the National Office provided a substantial submission on behalf of Tasmanian Professional firefighters. The details of the Inquiry are available by following the link included;

<http://www.parliament.tas.gov.au/ctee/House/HAComDev-SFC.html>

The following recommendations that were determined by the Inquiry are all acceptable to the Tasmania Branch. This was a good outcome for the Tasmania Branch given the Committee comprised three Liberal members one ALP member and one member from the Tasmanian Greens.

RECOMMENDATIONS

Recommendation 1

The Committee finds that on the evidence presented, that a review and reform of the Fire Services Act 1979 is necessary. An investigation should be undertaken to assess how the legislation can be amended or replaced to best service the organisations subject to the Act and should be undertaken

and completed within 12 months. The Fire Services Act 1979 must be reformed or replaced to allow for:

- 1.** A centralised funding model for the State Emergency Services;
- 2.** Streamlined approach to fire fighting between Tasmania Fire Service, Tasmania Parks and Wildlife Service, Forestry Tasmania and other relevant agencies;
- 3.** Resources to be allocated according to the risk and not according to local government municipal boundaries;
- 4.** The continuation of Tasmania having a singular fire service;
- 5.** Clear reporting lines;
- 6.** Improved governance structure; and,
- 7.** Include the fire permit system and inter-agency protocols.

Recommendation 2

The Committee finds that on the evidence presented, that section 107 of the Fire Service Act should be amended to provide greater clarity in relation to discretionary spending by the Chief Officer or alternatively, the Act should be amended to include the authorisation for the State Fire Commission to directly fund the State Emergency Service.

Recommendation 3

The Committee finds that on the evidence presented, that the Government should aim to establish a centralised funding model for the State Fire Service and State Emergency Services and to investigate the best options to progress this objective to ensure the sustainability of these services.

Recommendation 4

The Committee recommends the State Fire Commission be fully reimbursed for the costs of the State Emergency Service transfer in years 2014 to 2017.

Recommendation 5

The Committee finds that on the evidence presented, that the Fuel Reduction Burn Program should be maintained and have its budget directly funded to ensure that the program continues and does not hinder other services or programs.

Recommendation 6

The Committee finds that on the evidence presented, that the State Fire Commission should assess whether community engagement programs of the State Fire Services and State Emergency should be centralised.

continued on page 20

continued from page 19

Recommendation 7

The Committee finds that on the evidence presented, the State Fire Commission introduces key performance indicators reporting in relation to its work in community engagement to measure its success in program delivery and community engagement.

Recommendation 8

The Committee finds that on the evidence presented, that the Government should undertake a review of how firefighting equipment and gear in Tasmania can be better standardised with interstate equipment and gear to improve cross-jurisdiction resource utilisation.

Recommendation 9

The Committee finds that on the evidence presented, that volunteer firefighters are at risk of being undervalued and underrated and that the Government should use best endeavours to ensure the full acknowledgement and recognition of these services.

Recommendation 10

The Committee finds that on the evidence presented, that the State Government should establish an independent Chair to govern the State Fire Commission and that this governance arrangement should be included in the reform of the governing legislation.

A Case Study in Presumptive Cancer Legislation

In January this year a Training Officer with the TFS was diagnosed with Prostate Cancer.

The member immediately sought advice from UFUA. A workers compensation claim was lodged on the 9th of February 2016. The TFS/Insurers disputed the claim on April 28 2016. The insurer arranged for a full medical examination for the injured worker with Professor Fox whilst the worker was convalescing in the days immediately following surgery. The UFUA insists the examination be postponed and the Insurer agrees. The disputed claim is set down for a hearing. UFUA seeks an adjournment of proceedings. The TFS/Insurance lawyers advise considering seeking costs orders

against the UFUA request for adjournment. The UFUA continue to seek adjournment and the adjournment is granted.

UFUA seek legal advice, conduct research and begin obtaining the advice and the advice says:

UFUA won't win S81A dispute because of the following:

"..The arguments you want to put will not be adequate to persuade the Tribunal to dismiss the 81A application "...You cannot ignore that when section 27 says "subject to evidence to the contrary", if evidence is presented to the contrary, meaning to the effect that employment is not the major cause of the disease, then there is a reasonable argument..."

"..the presumption of cause of disease in section 27 is a rebuttable presumption. You may consider the evidence of Dr Fox to be flawed, but it is evidence nevertheless and it is being presented to the Tribunal to base an argument that it is reasonably arguable that your member's employment as a fire fighter is not the major cause of his prostate cancer..."

"...If you want to persuade the Tribunal that this is compensable, the place to do it is at the section 42 hearing and only after you get supportive medical or other evidence that contradicts what Fox says..."

The UFUA however is not persuaded by the advice and continues with the proceedings based on the following;

- Workers Rehabilitation and Compensation Act 1988 (Tasmania) (WRCA 1988) is solid with regard to presumptive cancer provisions for firefighters
- It provides a good opportunity to argue the "Intent of the legislation"
- Exhibit examples of the research conducted to show that the legislation is supported by scientific data clearly demonstrating that there is a higher incidence of certain cancers in firefighters WRCA 1988 sections to be relied upon; S27 (10 (d) of the Act says "the worker's employment as a fire-fighter is, in the absence of evidence to the contrary, taken to have contributed to a substantial degree to that injury." S27 provides specific detail. Also that S81A (3)(c) of the Act Says "if

the Tribunal considers that a reasonably arguable case exists concerning the liability of the employer to pay compensation by way of weekly payments, determine that compensation is not to be paid by the employer;" The UFUA does not consider the evidence of the employer to amount to evidence to the contrary and a reasonably arguable case is not good enough to overcome the presumptive provisions of the WRCA 1988.

Principle for the UFUA to rely upon for the legislation is that the specific provision of the Act should override the general provision.

The TFS/Insurer claimed the injury to the worker did not arise out of or in the course of the workers employment. This was based on evidence from Professor Fox that the worker's work was not the cause of the worker's cancer and on the balance of probability the worker's employment was not the cause of the cancer from a medical view. The TFS/Insurer also argued: Monash demonstrating a small risk (20% - 30%) for 20 years' service; and the worker's active service (as distinct from his training role) was considerably less than that, noting the worker's service as a firefighter was 6 years. (UFUA NOTE: the worker worked with the TFS for 23 years at the time of contracting cancer.) The TFS/ Insurer also argued that the training role was an exposure to artificial fire situations, that white European males contract cancer, and firefighters in Australia are mostly white European males, and the Australian lifestyle lends itself to Australian males catching cancer.

In rebutting these arguments the UFUA submitted evidence from;

- Senate Enquiry Report September 2011
- Monash studies
- Extract from Hansard 30 April 2013 2nd reading speech
- Parliamentary clause notes and fact sheet

The UFUA also detailed the intent of the legislation in Tasmania, other States and the Federal Parliament, the intent of the Tasmanian Minister (2nd Reading Speech) for the Tasmanian legislation, the specific provisions of s27 of the Act. The Branch also highlighted the inconsistency of the argument to use the general provisions of s81A to override the specific provisions of s27 to avoid obligations, that Professor

Fox's evidence was not in our opinion, evidence to the contrary and not helpful and that the TFS/Insurer has not demonstrated a reasonably arguable case in any event.

The Determination was "Not Satisfied a Reasonably Arguable Case Exists"

Some extracts from the Chief Commissioner's decision are included;

"...In considering the various aspects raised, Professor Fox appears to provide a discount as to the worker's active service as a fire-fighter noting that although he has a work history in excess of 15 years as a fire-fighter. It was not challenged that the worker has during his required period of service been employed as a firefighter..."
"...Consideration of carrying out firefighting operations which include: carrying out fire safety or fire prevention activities; or carrying out training activities. However the employer maintains that the expert medical opinion of Professor Fox amounts to evidence which could displace the presumptive provisions..." "Insofar as Professor Fox

might suggest that the worker was not actually involved in the extent of actual fire-fighting operations that may have been presumed as a justification for introducing the presumptive provision, such comment is irrelevant given the nature of the legislation itself which has wide operation in respect of the service of a career firefighter..."
"...Actual exposure to fire events is only relevant in respect of consideration of a claim by a volunteer fire-fighter. Professor Fox states; The most significant factor that has caused the workers prostate cancer is age. Otherwise it reflects his Anglo-Celtic ethnicity and Australian Lifestyle i.e. high meat diet etc..." "However Professor Fox states on p5; In general the cause of prostate cancer is not known. And further; There is no known specific cause..." "He then comments that the worker's active service, as compared to his training role, is much less than this and from a medical point of view his occupation was not the cause of his prostate cancer. This aspect of

his opinion is unhelpful and irrelevant as it was clear that Parliament has made its own determination based upon scientific studies that as a matter of policy, it is accepted there is an increased risk of suffering these diseases to an extent that it was appropriate enact the presumptive provision. The tribunal is not satisfied the employer would have a reasonable prospect of successfully defending this claim based upon the opinion of Professor Fox..." "On the one hand there is the presumptive provision which establishes the worker's entitlement. Contrary to that, in establishing, on balance, that this was not the cause Professor Fox says

there is no clear known causes of prostate cancer.

He then, however, opines that it is the worker's heritage and lifestyle having commented that Australian fire-fighters are almost universally of Anglo-Celtic ethnicity..."
"...One would expect that the intention was to overcome some of those difficulties by a presumption that if you are a fire-fighter, and you satisfy the qualifying provision then unless there is evidence to displace that presumption, your employment is taken to have contributed to a substantial degree to certain scheduled diseases..." "Surely the intention was to take into account some of those general matters that might otherwise cause difficulty in establishing an entitlement such as those relied upon by Professor Fox. It was on the background of this demographic picture that Parliament enacted the presumption, and the Tribunal is not persuaded that these factors are of a type or nature that were intended to be used to displace the presumption..." "In any event, Professor Fox expresses the view that the cause of prostate cancer is unknown and that there is no specific known cause. On the background of this clear statement of uncertainty he then offers age, ethnicity and diet as possible causes. Consideration of his opinion as expressed does not demonstrate, in the Tribunal's view, any reasonable prospect that his evidence could, at an arbitrated hearing, displace the legislative presumption..."

"...Therefore the Tribunal is not persuaded that a reasonably arguable case has been demonstrated and the appropriate orders will be made..."

The Branch won this case and a few weeks later a claim submitted by a firefighter suffering with brain cancer was accepted. Hopefully this decision will go a long way to stopping the TFS/Insurer from disputing future cancer claims submitted by firefighters in Tasmania.



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UFUA TASMANIA BRANCH

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Recruitment Standards under the Guise of “Diversity”

As all firefighters would know, the standard to become a professional firefighter is necessarily high. Recruitment procedures are, and must be, strenuous in their application to ensure that only the best applicants most suited to perform the tough job of a firefighter make it through. The current recruitment process applicants must meet to become firefighters in the MFB meet these standards and are designed to identify the best candidates.

This is why, the UFU-Victoria Branch was shocked to stumble across a note on the MFB website in January 2016 indicating that recruitment applications were currently closed while the recruitment procedures underwent a review. No consultation had occurred on this review and the Union was unaware that the employer was seeking changes given the success rate of the

current procedures. Following some further enquiries it soon became apparent to the union that not only was the MFB seeking to review the recruitment procedures but that they had in fact already determined what they were doing to them and were ready to go with a campaign to launch these new procedures within days of us becoming aware. All this happened with no consultation with the Union or firefighters and, in particular, the Training Department.

Currently the MFB has a multiple stage selection. First candidates must submit an application form online. Following this candidates will proceed to a written selection test called the Vocational Selection Test (VST).

This VST is an aptitude test run by ACER which includes testing of the following aptitudes in a candidate:

- Verbal Reasoning
- Quantitative Reasoning
- Abstract Reasoning; and
- Mechanical Reasoning.

Where candidates successfully pass all four components of the VST they then move on to a group assessment, followed by both a physical aptitude test and physical fitness test (shuttle run) followed by a psychological test, final interview. Candidates also complete pre-employment medical, driving and police checks. The MFB also applies a three strikes policy whereby a candidate effectively had three strikes at each stage of selection process to pass.

For candidates who successfully pass all stages of the recruitment process, they are then placed on an order of merit and selected for a recruit course in order of merit. The score of the order of merit is made up of the scores achieved in the VST, the group assessment and the final interview.

The process of selecting cases based on an order of merit is designed to ensure that the selection process is fair, transparent and based on merit. It should produce the best of the best.

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In February 2016 however, under the guise of “diversity”, the MFB sought to lower the standard of recruitment. The MFB’s definition of diversity was pretty slim and effectively reduced to a claim that their goal was to increase female participation in the workforce. As the dispute unfolded however it became very apparent to the UFU that the measures the MFB were employing would not actually increase female participation but would in fact lower the standard for selection.

The UFU lodged disputes in this case with both the Fair Work Commission and sought an urgent injunction from the Federal Court. Initially the disputes proceeded before FWC with several conferences taking place between the parties. At that stage it became apparent that what the MFB was seeking to do was to:

1. Remove the mechanical reasoning component of the VST;
2. “Recalibrate” the score required to pass the VST to a lower pass mark;
3. Remove the order of merit to introduce

unspecified criteria to allow the MFB to effectively pick less suitable candidates over more suitable candidates based on other considerations such as gender.

4. Remove the three strikes policy to effectively fast track candidates through. The MFB also altered their mode of recruitment. Where previously recruitment was open for employees to effectively apply at any time and progress through the system as and when opportunities to undertake the testing were scheduled, the MFB now looked to do campaign-based recruiting for each recruit course, and implement a gender quota for candidates applying, being 350 men and 350 women.

Following the matters being unable to be resolved by conference, with the only concession made by the MFB being to reintroduce the mechanical reasoning, the UFU continued to pursue its injunction and to have the matter arbitrated by a full bench of FWC. The question before the Commission was whether recruitment was

a matter that pertains to the employment relationship and, specifically, whether the changes proposed by the MFB were recruitment matters which pertained.

The Federal Court injunction resulted in a compromise approach allowing the selection process to continue on the basis of undertakings given by the MFB while the FWC case was heard.

The UFU vigorously defended the case in FWC producing witnesses to outline

to the Commission the importance of recruitment to the safety of firefighters. It was vital in that case for the UFU to outline the significance of employing the right, and the best people for the job to ensure that firefighters working side by side with each other can trust the standard that person needed to meet to be in that position next to them and potentially needing to save their life.

The Full Bench matter was heard in April and a decision was handed down in May which found that a large part of the MFB’s changes were matters that pertained to the employment relationship.

As such, the MFB is now consulting with the UFU on the changes going forward and the UFU is also seeking penalties in the Federal Court for the MFB’s initial breach by failing to consult.

We note that in this instance the recruits were able to proceed under the changed selection process for a course which commenced in July but interestingly for the MFB that selection process only produced one extra successful female candidate proving that the MFB’s changes, as we suspected, did not produce results.

The UFU has now, in consultation with the MFB, offered to establish a diversity working party to look for true measures to increase diversity in the workforce including, but not only limited to women and without lowering recruitment standards. We hope the MFB can engage positively with this proposal.

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UFU VIC BRANCH
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WA Branch Centennial Celebrations

In September 2016 the WA Branch celebrated 100 years of service to Firefighters and the highlight of the festivities was the Centennial Ball and the opportunity to host the National Union's Committee of Management Meeting with delegates and their partners from all over Australia and New Zealand.



UFUA National Committee of Management delegates and observers at the Perth NCOM meeting.

The Ball was a great success and we thank Colleen Hayward AM for her touching "Acknowledgement of Country" and for her tribute to Firefighters past and present.

The Branch is also very grateful for the support and attendance of our retired and serving members present, especially our Life Members and Jack Dennis Award recipients as well as our guests including Life Members of our National Union.

Thanks to our President Kevin Jolly who was instrumental in the design, the WA Branch has minted a ceremonial coin to mark the Centennial Year. The WA Branch coins are based on the "challenge coins" often shared by our Canadian and American fellow Firefighters with Firefighters travelling or meeting them through Union business. The tradition is that if you are challenged to produce your "coin" and cannot then you are obliged to "shout a round of drinks for those Firefighters in attendance". All those who attended the Ball received a Centennial coin, and all of those members who could not attend because they were on duty or unable to leave their Fire Districts in regional WA will receive a coin. The WA Branch is still in the process of getting these coins out to the Stations.

The National Union's NCOM meeting gave delegates the opportunity to share information and experiences to improve Firefighter health, safety, welfare and conditions and the WA Branch enjoyed hosting functions at our Union Office – the decommissioned Number 3 Station in North Perth.

UFUA WA BRANCH

WA Branch President: Kevin Jolly
WA Branch Secretary: Lea Anderson
Website: ufuofwa.net.au
email: ufuofwa.net.au/contact.html



Victoria Branch Past President Rod Knowles and Jean Knowles.



SA Branch President Mick Vander Jeudt and Susie Vander Jeudt



Victorian Branch Past President Rod Knowles, Bob Cook, Tony Harris AFSM (WA Branch President 1983-86, Life Member), Archie McBride (Life Member), Garry Clifford ('Jack Dennis Award' recipient), Dave Barker (Life Member).



ACT Branch Vic President Graeme Gallagher, UFUA OH & S Committee Coordinator Neil Mangelsdorf, SA Branch Committee Member Jesse Virgo and ACT Branch President Mate Peric



Victorian Branch member Steve Mundy and Fiona Mundy.



Victoria Branch BCOM members Rob Psail (left) and Dave Blundell (right) with Sue Nursey.



Victorian Branch Past President Rod Knowles, Bob Cook, Tony Harris AFSM (WA Branch President 1983-86, Life Member), Archie McBride (Life Member), Garry Clifford ('Jack Dennis Award' recipient), Dave Barker (Life Member).

Update on the Ferguson Report

The WA Branch strongly disagrees with the Ferguson Report's key recommendation that a separate Rural Fire Service should be created in WA – either as an independent new State Government Department or as an independent division of the existing Department of Fire and Emergency Services.

This recommendation will not deliver additional resources to the areas that need them the most, including country regional WA and the outlying parts of the metropolitan area where the rural urban interface poses significant challenges for preparation, mitigation, prevention and response.

Next year we will have a State Government election on March 10 and it is anticipated that WA will receive close to 30 cents in every GST dollar that we collect as, following the downturn of the mining industry, the State's economy is struggling.

There will be little money to waste on a new bureaucracy and the focus should be on ensuring that communities that are geographically isolated like Esperance are adequately resourced. The heightened

technicoloured atmosphere of a looming election means that the operationally driven, logical arguments are being overtaken by less rational responses.

The challenge ahead of all of us is to ensure that we get the best service we can, the best equipment, training, communications and interoperability possible so that our communities across WA are protected by professional and volunteer Firefighters working together.

One really disappointing feature of both the Ferguson Report and the response from some groups in our broader industry is the peddling of myths that discount the experience and expertise that our members have with bush fire. Together with the Volunteer Fire and Rescue Service, our members attend 80% of the State's fires wherever those fires start and it is obvious that some of the spokespeople from the Association of Bush Fire Volunteers cannot deal with that fact. There have been attacks on both professional and volunteer Firefighters and, conveniently for some, the contribution of our members from both Bush Firefighting and Fire and Rescue Service backgrounds is being ignored

or discounted. The same spokespeople from the ABFVs fail to encourage a more collaborative working environment with enhanced inter-operability that genuinely engages local knowledge and volunteers in a respectful way. Our communities across WA deserve better representation and service than the division and hostilities being peddled by a few noisy press addicts.

More positively, in the Kimberley recently our members alongside Aboriginal Rangers, volunteers and Pastoralists and Graziers successfully fought a fire the equivalent size of greater metropolitan Sydney or about one third the size of Tasmania. This occurred in a region where the local government agencies have MOUs with the Department of Fire and Emergency Services and have handed over bushfire responsibilities and there were no complaints of lack of respect or failure to work well together in the most trying of circumstances.

There are many challenges ahead of us and you all prepare for what will be another catastrophic fire season, rest assured we appreciate everything you do and stay safe.

Australian Parliament legislates to interfere with State Enterprise Agreements – Volunteers to get extraordinary rights to interfere in Enterprise Agreements

The only certainty is uncertainty. That was the assessment of the Fair Work Amendment (Respect for Emergency Services Volunteers) Bill by independent employment law expert Professor Andrew Stewart in his evidence to the Senate Committee.

The Liberal Party used the CFA enterprise bargaining dispute as an election platform with a promise to change workplace laws to legislate for third party interference in state emergency services enterprise bargaining.

The Liberal Party orchestrated the dispute and a division between volunteer and career firefighters in Victoria as a vehicle for election votes and funding.

In April 2016 the Liberal Party registered the “Save the CFA website” well before the Fair Work Commission issued a Final Recommendation for the resolution of the proposed enterprise agreement and before the CFA had rejected that proposed agreement.

The Bill was one of the first tests for the newly-elected Australian Parliament with a new-look Senate with 11 cross-benchers including the Pauline Hanson One Nation (4 Senators) Nick Xenophon Party (3 Senators), the Justice Party’s Derryn Hinch, Independent Jacqui Lambie, Family First Senator Bob Day and Democratic Liberal Party’s David Leyonhjelm

The background

The CFA UFU Operational Staff Enterprise Agreement 2010 expired in October 2013 and bargaining commenced under the then Napthine Liberal-National Government. In November 2014 the Andrews Labor Government was elected - creating history by ousting the one-term Coalition Government. At the time media commentators attributed Labor’s election success to the extensive Trades Hall campaign and in particular the campaigning of the United Firefighters Union’s “Put the Liberals Last” campaign educating the public of the Napthine Coalition’s \$66 million cuts to the CFA and MFB budgets.

Bargaining then commenced under the Labor Government and by November 2015 it was almost resolved with all but a handful of clauses to be agreed.

It was at this point that the then Minister and CFA orchestrated a break-down in bargaining and put the matter before the independent umpire - the Fair Work Commission – for resolution.

In January 2016 the Fair Work Commission issued a draft recommendation for resolution of the enterprise agreement – the UFU and firefighters accepted that recommendation – the Minister and CFA refused it.

The matter again went back to the Fair Work Commission and on 1 June 2016 the Fair Work Commission issued the final recommendation with amendments to the proposed agreement including a clause which expressly provides that the role of volunteers was not affected by the proposed enterprise agreement.

The Fair Work Commission had considered detailed submissions from the UFU and the CFA and undertook a detailed examination of the bargaining and the agreements that had been reached through that 3-year bargaining process. In the Final Recommendation the Commission was critical of the CFA’s attempt to re-agitate agreements that had been reached through the bargaining process:

“In the more recent conciliation sessions it appears to me that the CFA have sought to ignore the long and sensitive bargaining process that has been before me since November 2015. In the context of good faith bargaining and the general clause by clause approach that has been adopted before me, I find it difficult to now disturb the agreements that have been made during the course of bargaining.”

By this time there had been an unprecedented extensive partisan media campaign designed to split the public’s view of volunteer and career firefighters. The “Save the CFA” campaign was founded

on misinformation and lies vilifying career firefighters and labelling them as thugs and bullies.

The media peddled propaganda including claims that the proposed agreement would mean there would be a requirement for seven career firefighters to be at an incident anywhere in Victoria before anyone could start fire fighting. This was quickly proven to be incorrect – but never let the facts get in the way of a campaign of vilification.

The proposed agreement only covered career firefighters in 35 integrated stations of the CFA’s 1200 brigades and provides for seven career firefighters to be dispatched for guaranteed back-up to address the fact that volunteer brigades by their nature are unable to respond 24/7.

The Liberal Party had made the dispute a Federal Election issue establishing and promoting the “Save the CFA” website which was a Trojan horse to solicit campaign funds for the Liberal Party. The unsuspecting public thought it was an independent campaign website and only the discerning would have scrolled down to see it was actually administered by the Liberal Party.

To say there was a media frenzy was an understatement. In one month alone one newspaper published 80 anti-UFU stories.

It was in this context that the Fair Work Commission issued its Final Recommendation having been requested by the CFA in November 2015 to resolve the dispute. The Final Recommendation expressly address the volunteer issue:

“I do consider it necessary to recommend changes to the Agreement to underline that the Agreement only applies to paid professional firefighters and does not apply to volunteer firefighters or affect their important role. The changes also underline the maintenance of the discretion of incident controllers in managing resources in the interests of public safety. The changes to clause 83.5 are also designed to emphasise that the provisions only relate to integrated stations and to the work of professional firefighters. The role of volunteers

in fighting bushfires and maintaining community safety and delivering high quality services to the public in remote and regional areas and in integrated stations is not altered by this Agreement. Recommendations 1, 4, 7, 8, 9, 12 and 13 below are directed to this outcome."

Rather than resolve the matter the Victorian Emergency Services Minister resigned, the CFA Board was dismissed closely followed by the resignations of the CFA CEO and Acting Chief Officer.

In the announcement of the Board dismissal, the new Emergency Services Minister acknowledged the CFA Board had been heavily criticised in the 2015 Victorian Fire Services Review and the Victorian Parliamentary Inquiry into the CFA Fiskville Training Ground. The Fire Services Review had found in both the CFA and MFB there was an enormous divide between senior management and firefighters and that morale was at an all-time low. The culture was likened to "warfare". The Fiskville report found that CFA Management and Board knew the Training Ground was contaminated and that the practices were unsafe or contravened safety standards. The Inquiry found that the in all likelihood the unsafe practices at Fiskville would have caused illness and subsequently nearly 400 firefighters are seeking advice and support after knowingly being exposed to the toxic contamination.

At this time the Volunteer Fire Brigades Victoria sought an injunction in the Supreme Court to stop the CFA putting the proposed agreement out to the employees for vote, claiming it breached the CFA's obligations to volunteers under the CFA Act and interfered with the Chief Officer's powers.

The new CFA Board subsequently agreed to the proposed CFA UFU Operational Staff Agreement.

Prime Minister Malcolm Turnbull stopped off in Victoria on the Federal Election campaign trail promising to introduce new workplace laws to "protect volunteers" which actually meant legislating for third party interference in enterprise bargaining.

The result was the Fair Work Amendment (Respect for Emergency Services Volunteers) Bill 2016 and sent to the Senate's Education and Employment Legislation Committee for a fast-tracked inquiry. That Committee was already laden with the suite

of anti-union legislation that the Coalition Government had used as a trigger for the Double Dissolution.

The Bill was introduced on 31 August, referred to the Senate Committee on 1 September with a Senate Committee Report back date of 10 October 2016. The public and the UFUA were afforded just seven working days for submissions although we later discovered volunteers and others were given more time.

There were only two hearing dates – the first out in the volunteer area of Macedon, designed to attract as many volunteer firefighter witnesses as possible.

16 of the 34 CFA integrated stations made a submission and had representatives appear as witnesses. These integrated station submissions were signed off by career and volunteer members of their brigade. It was evident that the volunteers that served alongside career firefighters at the integrated stations understood the proposed agreement would not affect them and they were supportive of the proposed agreement being finalised.

The vitriolic evidence from volunteers was from areas where there weren't integrated stations and would barely ever see a career firefighter.

There was a marked difference in the evidence and the presentation. The integrated stations provided factual evidence and handled the situation professionally despite provocation. Some volunteer witnesses argued with Senators and heckled the career firefighters giving evidence. One admitted in evidence that he had approached a group of career firefighters aggressively at the hearing.

The UFUA supplemented the Victorian Branch's extensive submission with submissions from the ACT, Aviation, Queensland, South Australia and Tasmanian Branches and the National Office.

UFUA National Secretary Peter Marshall ensured no stone was left unturned as he traversed the country to educate the Federal politicians, and in particular the Senate cross-bench armed with evidence to dispel the propaganda that had been relentlessly peddled in the public arena.

The UFUA provided legal advice demonstrating the intended and unintended consequences of the Bill.

Other unions and independent legal specialists provided submissions providing the grounds for rejecting the Bill.

But at the end of the day the numbers went against us.

It became known during the Senate Inquiry process that the CFA had commissioned Seyfarth Shaw reported by media to "review its existing workplace relations arrangements and to reset its relationship with the United Firefighters Union". Seyfarth Shaw are regarded internationally as a union-busting firm and the media reported that the advice to the CFA "lays out a slew of hardline measures for the CFA to start driving the change now towards a model of reduced union power in the workplace including hiring firefighters on individual or non-union agreements."

It was against this backdrop that the UFU were campaigning against "Respect for Emergency Services Volunteers" but the warnings of the intended and unintended consequences of Bill went largely unheeded.

The Senate Committee debated the Bill on 10 October and passed it that night – with the support of Pauline Hanson's One Nation, Nick Xenophon Team, Justice Party Derry Hinch, the Democratic Liberal Party Senator David Leyonhjelm and Family First Bob Day. Only Tasmania Senator Jacqui Lambie voted against with the ALP and Greens.

Within two days it had Royal Assent and was enacted.

The Fair Work Act Amendment provides for third party interference in "designated emergency management body" enterprise agreements:

- 1.** Discriminates against fire service employees by declaring a new range of enterprise agreement clauses 'objectionable' that would not be objectionable for any other employee:
- (1)** A term of an enterprise agreement is an **objectionable emergency management term** if an employer covered by the agreement is a designated emergency management body and the term has, or is likely to have, the effect of:
- a** restricting or limiting the body's ability to do any of the following:
 - i.** engage or deploy its volunteers;
 - ii** provide support or equipment to those volunteers;

continued on page 28

continued from page 27

- iii manage its relationship with, or work with, any recognised emergency management body in relation to those volunteers;
 - iv otherwise manage its operations in relation to those volunteers; or
 - b requiring the body to consult, or reach agreement with, any other person or body before taking any action for the purposes of doing anything mentioned in subparagraph (a)(i), (ii), (iii) or (iv); or
 - c restricting or limiting the body's ability to recognise, value, respect or promote the contribution of its volunteers to the well-being and safety of the community; or
 - d requiring or permitting the body to act other than in accordance with a law of a State or Territory, so far as the law confers or imposes on the body a power, function or duty that affects or could affect its volunteers.
2. Provides for volunteer organisations to "make a submission" on any matter before the Fair Work Commission

that arises under Part 2-4 Enterprise Agreements and "the matter affects, or could affect, the volunteers of a designated management body".

The Amendments specify fire-fighting body or a State Emergency Service of a State or Territory as designated emergency management bodies and provide for regulation to determine any other emergency service bodies to be caught by the Amendments.

The Act has been specifically written to capture the proposed CFA UFU Operational Staff Enterprise Agreement 2016 to enable the volunteers to contest the agreement when the CFA applies to have it certified.

Both the Federal Minister of Employment Michaelia Cash and the Volunteer Fire Brigades Victoria (VFBV) have already declared they will interfere.

The Minister's lawyers wrote to the CFA shortly after the enactment of the Fair Work Amendments listing 60 clauses in the proposed agreement that they allege are now unlawful.

This came on the back of a similar list that the VFBV have provided in their Supreme Court application which lists the 45 clauses and 9 schedules in the proposed agreement that they believe impact on volunteer firefighters. The VFBV sought injunctions on two occasions in the Supreme Court since June 2016 to stop the CFA from putting the proposed agreement to vote by CFA employees. Post the enactment of the Fair Work Act Amendments the VFBV withdrew the Supreme Court action.

Key Clauses which the VFBV and the Federal Government are attacking include rostering, minimum staffing levels, consultation, dispute resolution, classifications, career paths and opportunities, Emergency Medical Response, Road Accident Rescue and the training framework.

The CFA has since notified the Fair Work Commission of a bargaining dispute and the matter has been set down for conciliation.



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DROWNING DOUBLE SHOCK

ACT firefighter Neil Maher has received a bravery award for his off-duty rescue of two drowning children – although at the time he thought he was saving only one.

Neil was walking with his daughter Tianna beside Yerrabi Pond at Gunghahlin on a Friday afternoon in 2012 when he heard the happy sounds of children at play.

As he walked beside the shore of the normally calm pond, he noted that water was pouring over its spillway.

After days of rain, the swift-flowing water was sweeping over the bike path and out toward the centre of the pond.

He then realised that the happy squeals were in fact the screams of children pointing toward the centre of the pond.

Neil was shocked to realise that there was a head bobbing up and down in the centre of the pond.

He immediately swam to the rescue of the stricken child and started to tow her back to shore.

He was struck by the weight he was towing, and asked 12-year-old Emily de Gier to help him by kicking the water.

It was only when they reached shallow water that he realised he was towing two children.

Emily was clinging tightly to the hair of her 13-year-old friend Zartash Sarwar.

Despite swallowing a lot of water, Emily had held onto her friend as she struggled to remain afloat.

Meanwhile Zartash had turned blue, had no pulse, and her eyes had rolled back.

Neil immediately began CPR, periodically checking to see if Zartash's heart was beating.

A plainclothes policeman, who had been patrolling in the area, joined in.



Neil with his mum Allana, daughter Tianna and wife Louise at Government House in Canberra following the awarding of the Commendation for Brave Conduct.

“Periodically we’d check, no pulse, we’d keep going then she started to vomit ... and finally we got a pulse,” he told the Canberra Times.

An ambulance arrived soon after and took the girls away.

Neil was humble about his role in the rescue after receiving a commendation for brave conduct as part of this year’s Australian Bravery Awards.

“It was just a series of lucky events, she was lucky her friend held on to her, I just did it,” Neil says.

“I think I just went into work mode. I don’t think I did anything special that someone with my training would not have done.”

In an occupation where follow-up is rare, Neil has been delighted to catch up with Zartash and her family on occasion at the local shops.

The incident remains one of the most memorable in Neil’s 30-year career as a firefighter, currently acting Commander with ACT Fire & rescue.

“You think about it afterwards – fortunately it had a good ending.”

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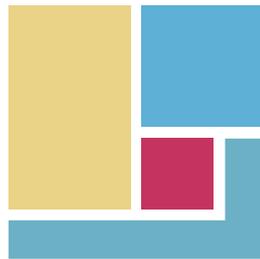
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Bruck Textiles is a privately owned Australian company that has been developing fabrics in Victoria, since 1946. Today, Bruck provides innovative high quality technical textile solutions which add value to our customers' businesses and superior benefits to our end users. Bruck is driven to provide high performance and comfortable protective textile solutions for personnel in Defence, Fire and Emergency Services, Metal Smelting along with Industrial and Corporate Wear.

Bruck is globally connected to all sources of flame resistant fibre and raw materials that are at the forefront of the most advanced protective fabrics used in our industry. Locally, working with RMIT and CSIRO researchers, we are developing innovative pathways for fabric and assembly developments that will continue to support the domestic capability in the Australian Industry.

Essential to all protective clothing is fibre. Every woven, knitted or non-woven textile used in firefighters protective clothing is produced from one or more fibres sourced from DuPont, PBI Performance, Teijin and/or Lenzing. These fibres are blended, spun into yarn and imported for use in Bruck's weaving and finishing operations.

Chemistry and dyes, essential to achieving certain performance requirements and corporate identity, are supported locally by Huntsman and DyeStar. All textiles used for protective clothing involve some kind of chemical processing, be it the finish that imparts chemical run-off performance or anti-microbial properties that keeps stationwear fresh for longer. For Bruck, this also requires that the chemistry used is approved by OEKO-TEX® and poses no harm to human health in the finished article.

Bruck is invested in commercial research and development and has strong links with Australia's leading institutions involved in researching innovative new solutions for manufacturing, textile design and protection. CSIRO has extensive expertise in chemical and fibre research and is supporting the long term competitiveness of Australia's cotton, carbon fibre and chemical industries. RMIT School of

Fashion and Textiles and the Centre for Advanced Materials and Performance Textiles (CAMPT) work on projects that have direct and indirect benefits to the industry. Key amongst these is ensuring the succession of the domestic capability and knowhow for the future benefit of manufacturing and users of personal protective clothing. RMIT's capabilities also extend to the measurement of ergonomic factors in garments. Internationally, both organisations have exposure through published research and, along with the commercial industry, representatives from both RMIT and CSIRO gain insights into emerging trends and new research that may shape the way materials and assemblies are produced in the future.

Textile testing is critical for protective clothing and certified garment manufacture. The local industry relies on NATA accredited laboratories providing public testing to all or part of the Australia/New Zealand Standards for wildland and structural firefighting PPE. This capability is met by AWTA, RMIT Textile Testing, VICLAB and Bruck's own ISO 15025 accredited laboratory. Within the Bruck laboratory NATA scope of accreditation, we cannot provide a complete suite of testing according to the methods listed in AS/NZS 4824 and AS/NZS 4967. As accredited testing represents a significant contribution to product quality assurance, Bruck utilises independent third party testing providers that are trusted and provide timely, reliable and consistent results. In some cases the frequency requires in-house laboratory, for example materials for wildland and structural firefighting require flammability testing per batch (up to 5,000m) – as of August 2016 there were three test houses in Australia accredited by NATA to issue ISO 15025 test reports and one of those NATA laboratories is located at Bruck's Wangaratta Mill.

Further utilising our textile knowledge, Bruck provides consultation to garment makers and laundries on essential maintenance and limitations for cleaning and repair of protective fabrics.

Bruck has the expertise and knowledge here in Australia to ensure a sustainable domestic industry to support local jobs and world class protective textiles.

PFC: Chemicals of Concern

BY HENRY LAWRENCE

Significant media attention has been directed towards the current situations in the CFA Fiskville fire training area and several Defence Force bases with serious contamination issues, mainly attributed to hot fire training. Oakey and Williamtown air bases are two significant defence sites which have had quite a lot of study and research done over the past three years. Aviation Rescue Firefighting (ARFF) has used foams containing Per Fluorinated Chemicals (PFCs) since about 1980 for more than 30 years, training with it through foam branches, handlines, hose reels and fire vehicle monitors on an almost daily basis. ARFF ceased the use of 3M Light Water AFFF in 2002 and then ceasing the use of Ansulite AFFF its replacement in 2010.

What does exposure to PFCs mean to you, the Australian firefighter? Whom do you trust when your employer and the government tells you that it's perfectly safe and yet more and more studies, international government authorities, the UN and other acknowledged experts are saying it's not?

The family of Perfluorochemicals (PFCs) are known to be either ingredients or degradation products from the foams used on a daily basis by some firefighters in training and operations until quite recently. The most commonly known and talked about are PFOS and PFOA.

The C8 science panel research which was used recently by the US courts to successfully award damages to plaintiffs suffering certain cancers, shows Perfluorochemicals probable involvement/link in the increased incidence of:

1. High Cholesterol
2. Kidney Cancer
3. Testicular Cancer
4. Thyroid Disease
5. Pregnancy-Induced Hypertension/Preeclampsia
6. Ulcerative Colitis

It is also very important to note that the co-operation of CFA Senior management had to be seriously challenged by the Victorian parliamentary enquiry committee. This is noted in the forward to their special report to Parliament:

“For these reasons it is disheartening for this Committee to have to table this special report. Decision makers within **the CFA have done a disservice to the CFA legacy and CFA firefighters twice over.** First the tragedy of Fiskville itself and now the refusal to provide vital information to this inquiry.

“Every member of the Committee conducting the inquiry into Fiskville is committed to seeking out the truth. The Government referred this important matter to this Committee because in the words of the Premier of Victoria, the Hon. Daniel Andrews: ‘We need a full and frank inquiry to answer every question honour every worker and reassure every family.’”

Further on the CFA's executives reluctance to co-operate is the following quote from the VIC Enquiry Special Report:

“The CFA administration has issued many assurances to the Committee that it wants to cooperate with the Fiskville Inquiry. In spite of this the Committee **had to issue summonses** in order to

access critical information. We are now forced to table this report to Parliament due to documents not being produced under the terms of the summons relating to CFA Board papers.

“This special report details **the extensive withholding of information** that is crucial to the Committee's understanding about what happened at Fiskville from 1970 to the present.”

Unfortunately when you read of this sort of behaviour by Fire Service managers it is very hard to put any trust in what they tell you.

The main lesson to draw from the Oakey reports is the way the evidence there shows a strong connective link between the practices in place there on the base and the contamination they caused. ARFF Firefighters also have a proven connection in the form of the Queensland University study that was conducted in 2013. ARFF Staff participated in regular almost daily foam training and all the 150 staff tested had significant PFC readings and that was 11 years after ARFF had stopped using 3M AFFF and changed to Ansulite AFFF.

The AECOM Report 2015 on the design of their Oakey study states:

“In order for a human receptor to be exposed to a chemical contaminant deriving from a Site, a complete exposure pathway must exist. An exposure pathway describes the course a chemical or physical agent takes from the source to the exposed individual and generally includes the following elements (USEPA, 1989):

- A source and mechanism of chemical release.
 - A retention or transport medium (or media where chemicals are transferred between media).
 - A point of potential human contact with the contaminated media.
 - An exposure route (e.g. ingestion, inhalation) at the point of exposure.
- “Where one or more of the above elements is missing, the exposure pathway is considered to be incomplete and there is therefore no direct risk to the receptor.”

So AFFF was in use almost daily from the early 1980s until 2010. For 30 years Airservices ARFF has exposed both their staff and their training grounds (some still in use today) to PFCs.

The Agency for Toxic Substances and Disease Registry (ATSDR) Toxicological Profile for PFC's states:

“Perfluoroalkyls are very stable compounds and are resistant to being broken down in the environment. Perfluoroalkyls in the air are expected to settle to the ground within days to weeks. Perfluoroalkyls may be carried through soil by groundwater and flooding and **become airborne during windy conditions.**” ATSDR (Draft) Tox Profile 2015.

This is a problem with any legacy fire training grounds still in use for hot fire training. Services that have trained with AFFF products for over 30 years would have poured millions of litres of 3% or 6% foam product on to these training areas. Even with very small concentrations of PFC's in the AFFF concentrate that still amounts to significant contamination. Staff that continue using these training grounds and aids are constantly being exposed to residual PFC dusts every time a rain event floats more of these PFC dusts to the surface.

A Finnish study conducted in 2014 into the use of AFFF by firefighters found the following routes of contamination:

“During the suppression of a liquid fire, firefighters may be exposed to AFFF’s through inhalation and dermal exposure routes. Contaminated personal protective equipment and fire suits might also increase the risk of hand to mouth transfer and eventual exposure via the gastrointestinal tract. The washing of this equipment (PPE) is still a big problem for fire brigades in Finland and the use of contaminated firefighting suits is a very common practice. Thus firefighter’s short and also long term occupational exposure to PFAA compounds **appears to be more than evident.**” Toxicology Letters 231 (2014)

This study confirms that the pathways for contamination during training have been confirmed via scientific study. So while Australian firefighters were training with AFFF for the past 30 years they were being constantly contaminated.

An epidemiological study of retired employees involved in the production of PFCs revealed that the human serum elimination half-lives were 4.37yr for PFOA and 8.67yr for PFOS (Burris et al., 2002).

So it is interesting to note that the Airservices ARFF study into Firefighters and Emergency Vehicle Technicians (EVTs), conducted in 2013, 11 years after having ceased the use of 3M AFFF, shows high PFC contamination levels with some staff still very heavily contaminated.

Blood serum concentrations of PFOS, PFHxS and PFOA are summarized for the different stations--. Serum concentrations of PFOS ranged between 3 ng/ml and **391 ng/ml serum**. The highest average concentrations were found in ARFF staff currently working in Rockhampton, Karratha, Adelaide, Sydney and Coolangatta. Rotander. A, Toms. L, Aylward. L, Kay. M, Mueller. J, (2013)

This same finding was noted by Dr Lloyd-Smith in June this year, 2016:

“A 2014 study of 149 Queensland firefighters detected multiple PFCs in their serum. The three most prevalent and detected in all samples were PFOS, perfluorohexanesulfonic acid (PFHxS) and PFOA. Their serum levels of PFOS were approximately **six to ten times higher** than those found in the general population in Australia. The median/mean level in firefighters was 66/74 ng/mL compared to 12 ng/mL (mean) and 6.8 (median) ng/mL in the general population in Australia. The serum levels of other PFCs like PFHxS in firefighters were approximately **10 to 15 times higher** compared to the general population levels in Australia.” Lloyd-Smith. Dr M, Senjen. Dr R, (June 2016)

“Even ten years after the phase out of 3M AFFF Industrial Fire Fighting Foam, PFOS serum levels remained above 100 ng/mL and 200 ng/mL in 27% and 3% of the participating firefighters, respectively.” Lloyd-Smith. Dr M, Senjen. Dr R, (June 2016)

“As PFOS and PFOA do not break down, are passed from one generation to the next via breast milk and in utero, and have in some cases demonstrated changes in gene expression at very low levels, it is possible that like lead and mercury, there may be **no safe level of exposure** to PFOS and /or PFOA.” Lloyd-Smith. Dr M, Senjen. Dr R, (June 2016)

One of Dr Lloyd-Smith’s conclusions in her report is: Special consideration **must** be given to the health and wellbeing of firefighters and other affected workers.

Olsen. G W, et al (2007) found in his study of 26 retired chemical workers the same slower than normal rate of elimination.

“It is possible that the rate of elimination may have resulted in more shallow slopes as concentrations declined because of the influence of environmental exposure.”

This slowing or reversal of PFC elimination was also noted in an internal memo of the 3M Company:

“The tests results that were reviewed at our meeting seem to substantiate a trend that has been developing over the past 12-18 months - A tendency for these levels in a number of people to no longer show the previous pattern of decline, in fact, a fair number are now demonstrating an increase in blood fluorine levels.

“It is certainly possible that with steady and concentrated production of these surfactants in Bldg. 15, and despite our controls, exposure opportunities are providing a potential- uptake of fluorochemicals that exceeds excretion capabilities of the body. If this is true, additional protective measures will be needed.” 3M Internal Memo 1984.

Current state of PFC Human Health Studies:

The C8 Science Panel Findings include a series of probable link studies these link studies with a positive finding are noted below:

Probable Link Evaluation of Autoimmune Disease July 30, 2012

Conclusion: On the basis of epidemiological and other data available to the C8 Science Panel, we conclude that **there is a probable link** between exposure to C8 (also known as PFOA) and ulcerative colitis, and find no probable link between PFOA and any of the other autoimmune diseases (rheumatoid arthritis, lupus, type1 diabetes, Crohn’s disease, or multiple sclerosis).

Probable Link Evaluation of Cancer April 15, 2012

Conclusion: On the basis of epidemiologic and other data available to the C8 Science Panel, we conclude that **there is a probable link** between exposure to C8 (also known as PFOA) and testicular cancer and kidney cancer but not any of the other cancers that were considered.

Probable Link Evaluation for heart disease (including high blood pressure, high cholesterol, coronary artery disease) October 29, 2012

Conclusion: On the basis of epidemiological and other data available to the C8 Science Panel, we conclude that

1. there is not a probable link between exposure to C8 (also known as PFOA) and diagnosed high blood pressure (hypertension)
2. **there is a probable link** between exposure to C8 (PFOA) and diagnosed high cholesterol (hypercholesterolemia)
3. There is not a probable link between exposure to C8 (PFOA) and coronary artery disease, including its manifestations as myocardial infarction, angina, and coronary bypass surgery.

Probable Link Evaluation of Pregnancy Induced Hypertension and Preeclampsia December 5, 2011

Conclusion: On the basis of epidemiologic and other scientific data available to the C8 Science Panel, we conclude **that there is a probable link** between exposure to PFOA (C8) and pregnancy-induced hypertension.

continued on page 34

continued from page 33

Probable Link Evaluation of Thyroid disease July 30, 2012

Conclusion: On the basis of epidemiological and other data available to the C8 Science Panel, we conclude **that there is a probable link** between exposure to C8 (also known as PFOA) and thyroid disease.

The C8 studies have been used by US law courts to rule on exposure and contamination cases involving PFC's. The US EPA has also issued drinking water guidelines that confirm the carcinogenic potential of PFOA.

In February 2006, the EPA Science Advisory Board recommended to EPA that **PFOA is a "likely carcinogen"** based on its assessment of available studies.

US EPA: Taken together, the weight of evidence for human studies supports the conclusion that **PFOS exposure is a human health hazard**. At this time, EPA concludes that the human studies are adequate for use qualitatively in the identification hazard and are supportive of the findings in laboratory animals

"How the Health Advisories were developed: EPA's health advisories are based on the **best available peer-reviewed studies** of the effects of PFOA and PFOS on laboratory animals (rats and mice) and were also **informed by epidemiological studies of human populations** that have been exposed to PFASs. These studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes)." EPA Fact Sheet May 2016.

The United Nations Environment Programme (UNEP) Persistent Organic Pollutants (POP) Review Committee (POPRC) have conducted in depth studies and risk assessments on PFC's and also agree with danger and risk of PFOA and PFOS chronic exposure.

"The hazard assessment of PFOS, prepared by the OECD in 2002, concluded that the presence and the persistence of PFOS in the environment, as well as its toxicity and bioaccumulation potential, indicate a cause of concern for the environment **and human health**.

"It is concluded that PFOS is likely, as a result of its long-range environmental transport, to lead to **significant adverse human health** and environmental effects, such that global action is warranted."

UNEP POP (e) Adverse effects: PFOA

(i) There is epidemiological evidence for kidney and testicular cancer, disruption of thyroid function and endocrine disruption in women (Steenland et al., 2012; Knox et al., 2011a, b; Melzer et al., 2010; ECHA 2014);

(ii) There exists experimental evidence from animal studies (Sibinski et al., 1987 and Biegel et al, 2001, cited in ECHA, 2011) that PFOA induces tumours (e.g., in the liver).

Developmental effects have been observed in mice (e.g. Lau et al., 2006). Postnatal administration of ammonium salts of PFOA (APFO) in mice indicated adverse effects on mammary gland development (delayed/stunted) in offspring.

Repeated oral exposure of several species to PFOA showed adverse effects such as mortality, reduced body weight gain, cyanosis and liver cell degeneration and necrosis (ECHA, 2011).

Mothers excrete PFOA via breast milk, which causes concern for the health of breastfed infants (ECHA, 2011).

There is sufficient evidence that **PFOA meets the criterion on adverse effects**.

So the UN's expert committee on Persistent Organic Pollutants also agrees that there is sufficient evidence to support **significant adverse effects** on human health.

National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

The National Industrial Chemicals Notification and Assessment Scheme has a Human Health Tier 2 assessment on its website for PFOA and PFOS.

It should also be noted that Australia adopts the GHS coding as of the 01/01/2017 and so the Criteria of Toxicity and Carcinogens as shown in the above tables will be accepted Australian coding in all States and Territories as of then.

The World Health Organisation (WHO), International Agency for Research on Cancer (IARC) Monographs 110 provide the following assessment:

"The evidence for cancer of the testis **was considered credible** and unlikely to be explained by bias and confounding, however, the estimate was based on small numbers.

"The evidence for cancer of the kidney **was considered credible**; however, chance, bias, and confounding could not be ruled out with reasonable confidence.

"The evidence regarding other cancer sites, including the urinary bladder, thyroid, prostate, liver, and pancreas was also evaluated.

"Some **positive associations were observed** for cancers of the bladder, thyroid, and prostate, but the results were inconsistent among studies and based on small numbers. The evidence for carcinogenicity for all of these sites was judged to be inadequate.

"**Overall evaluation:** Perfluorooctanoic acid (PFOA) is possibly carcinogenic to humans (Group 2B)."

Reproductive Toxicity:

The Navigation Guide Integrated Animal and Human Studies PFOA. Lam et al (2014)

Results: We identified 18 epidemiology studies and 21 animal toxicology studies relevant to our study question. We rated both the human and nonhuman mammalian evidence as "moderate" quality and "sufficient" strength. Integration of these evidence ratings produced a final strength of evidence rating in which review authors **concluded that PFOA is "known to be toxic" to human reproduction and development** based on sufficient evidence of decreased foetal growth in both human and nonhuman mammalian species.

Conclusion: We concluded that developmental exposure to PFOA adversely affects human health based on sufficient evidence of decreased foetal growth in both human and nonhuman mammalian species. The results of this case study demonstrate the application of a systematic and transparent methodology, via the Navigation Guide, for reaching strength of evidence conclusions in environmental health.

Summary: There is a significant weight of hard scientific evidence that shows that PFC's are harmful to humans. There is no doubt at all that Australian Firefighters were exposed to a significant amount of PFC's. Testing of staff and sites have proved this beyond doubt. It is also likely

PFOA Work Health and Safety

PFOA Hazard	Approved Criteria (HSIS) ^a	GHS Classification
Acute Toxicity	Harmful if swallowed (Xn; R22) Harmful by inhalation (Xn; R20)	Toxic if swallowed - Cat. 3 (H301) Toxic if inhaled - Cat. 3 (H331)
Irritation / Corrosivity	Irritating to eyes (Xi; R36)	Causes serious eye irritation - Cat. 2A (H319)
Repeat Dose Toxicity	Toxic: danger of serious damage to health by prolonged exposure through inhalation (T; R48/23) Toxic: Danger of serious damage to health by prolonged exposure if swallowed (T; R48/25)	Causes damage to organs through prolonged or repeated exposure through inhalation - Cat. 1 (H372) Causes damage to organs through prolonged or repeated exposure if swallowed - Cat. 1 (H372)
Carcinogenicity	Carc. Cat 3 - Limited evidence of a carcinogenic effect (Xn; R40)	Suspected of causing cancer - Cat. 2 (H351)
Reproductive and Developmental Toxicity	Repro. Cat 2 - May cause harm to the unborn child (T; R61)	May damage fertility or the unborn child - Cat. 1B (H360D)
Acute Toxicity	Harmful if swallowed (Xn; R22)* Harmful by inhalation (Xn; R20)*	Toxic if swallowed - Cat. 3 (H301) Harmful if inhaled - Cat. 4 (H332)
Repeat Dose Toxicity	Toxic: Danger of serious damage to health by prolonged exposure if swallowed (T; R48/25)*	Causes damage to organs through prolonged or repeated exposure - Cat. 1 (H372)
Carcinogenicity	Carc. Cat 3 - Limited evidence of a carcinogenic effect (Xn; R40)*	Suspected of causing cancer - Cat. 2 (H351)
Reproductive and Developmental Toxicity	May cause harm to breastfed babies (Xn; R64)* Repro. Cat 2 - May cause harm to the unborn child (T; R61)*	May cause harm to breast-fed children (H362) May damage the unborn child - Cat. 1B (H360D)

that current staff are being contaminating through the continued use of PFC contaminated legacy training grounds, training aids and bulk storage areas where the PFC dusts still rise to the surface in every heavy rain event. Given the widely publicised actions taken over the CFA and Defence training grounds there is no reasonable excuse for an employer with a duty of care to have not taken action to screen the health of past and present staff.

HENRY LAWRENCE IS SECRETARY OF THE UFUA AVIATION BRANCH.

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continued on page 36

continued from page 35

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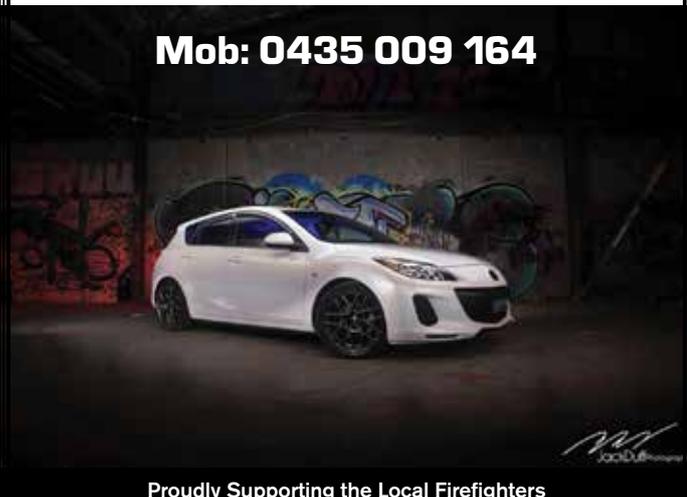
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VICTORIAN RESULTS SHOCK

BY MICK TISBURY

Victorian firefighters are receiving devastating test results after exposure to PFCs.

This follows the recommendation of the Victorian Parliamentary inquiry into the notorious Fiskville training ground that the Victorian Government increase its use of human biomonitoring to gather data and investigate the health effects of exposure to PFCs; and monitor PFC levels in all firefighters in Victoria.

Despite that, it took eight months to force the MFB and CFA to provide the testing. This has now occurred and the first results are alarming.

In October this year the German Human Biomonitoring Commission revised its safe levels of PFOS and PFOA based on recent epidemiological and animal studies. It says the level of PFOA in blood plasma should not exceed 2 nanograms/ml, and 5 nanograms/ml for PFOS.

The UFU is aware of that 600 exposed firefighters have now received their results, and many are at least 10 to 100 times the documented safe levels defined by the German report.

One firefighter has a result of more than 400 nanograms of PFOS per ml after days of training at Fiskville, and years of working with foam on the job.

The effects of PFCs include birth defects, cancers, thyroid disorders, and immunity disorders. Effects are stronger in children who were exposed due to living near Fiskville and air bases.

There is also grave concern because PFOS has a half-life of 5.6 years. It would take many years to get blood down to a safe level - if there is no further exposure.

It is bio-accumulative and not easily excreted

It also bio-magnifies so a female firefighter with a blood level of 100 could give her child a level of 200 through breast-feeding.

And PFOS causes environmental damage. It is restricted by the Stockholm Convention on Persistent Organic Pollutants, a group which most recently met in September 2016.

Similar concerns are occurring near contaminated air bases such as RAAF Williamstown at Newcastle, the RAAF Darwin air base at Rapid Creek in the NT, and the Oakey air base near Toowoomba in Queensland. Class actions have been foreshadowed

by residents near these facilities, as property prices have fallen and they are unable to sell their homes.

The UFUA recommends that all firefighters be tested for PFC levels.

The UFU Victorian Branch is actively engaging with medical institutions to find methods to lower PFC levels in firefighters' blood.

“The UFU is aware of that 600 exposed firefighters have now received their results, and many are at least 10 to 100 times the documented safe levels defined by the German report.”

SENIOR STATION OFFICER MICK TISBURY HAS SERVED 27 YEARS WITH THE MFB.

CALEB GEPPERT

Melbourne firefighter – and former Big Brother contestant – Caleb Geppert is on a long journey to recovery, but hopes his experience may give encouragement to others.



Caleb worked as a flight manager with Virgin Australia (2003-06), a licensed plumber (2006-09), and was based in Dubai for Emirates airline (2009-12) when he applied to join the MFB.

He flew back and forward for interviews before securing his dream job with the MFB.

In his first weeks as a recruit his world was dashed when his mother died. He had returned home to find her deceased in the bathroom. His first experience at CPR was the unsuccessful attempt on his mum.

With only a day off from training, he returned to work.

“I was so determined to pass the MFB recruits course, being my dream job,” he explained. “I relied heavily on peer support and my father and crew mates.”

A year into his MFB career he took a break to be a contestant on Big Brother. His mother had been a keen fan of the show, and Caleb felt he was doing something his mum would like.

According to press reports at the time, September 2013: “Nice guys don’t always finish first. Caleb Geppert has been evicted from Big Brother after one of the closest votes in the show’s history.”

A year later, Caleb suffered another setback, when he was injured at South Melbourne fire station.

Over the next two years he had knee stabilisation surgery followed

by five dislocations, ripped a muscle and had further knee stabilisation surgery, dislocated and snapped bones in his ankle, had two rounds of ankle surgery, and then a shoulder operation after two years on crutches caused bursitis and damaged his AC joint.

Earlier this year he slipped at home, ripping the metal bolt from his bone and shattering his kneecap. His sixth operation is a last chance to fix his knee. Surgeons have removed a section of the tibia, and bolted it to the fibula. His medial patella ligament has been reconstructed and his kneecap glued back together.

In the meantime his beloved father Rudi had succumbed to cancer, a year after a shock diagnosis.

Caleb’s dad taught PE to students at a special school. Outside school he raised money to buy them bikes, and took them on weekend bike rides.

Caleb says his dad was “a modern day Mother Teresa but in a male form” and his death hit Caleb hard.

“He was my best mate so when he died I fell to pieces, drinking heavily and gambling, doing stupid things which went against everything dad stood for.

“But I couldn’t handle life and needed escape.

“On September 10, when it got to the one-year anniversary of my



Caleb in 2014 (left) and 2015 (right).



father dying, I promised myself and him I'd get my act together and I have, along with the help of the peer support people and my doctor and psychologist and close friends at the MFB and other close friends and my sister.

"It's been a heart wrenching time the last few years and I was at a point I wanted to take my life but I didn't, thank god, mainly because I knew how much of a waste this beautiful thing called life would be and how much my dad would kick my butt in heaven.

"Despite a great life, homes, money in my bank, the best job ever,

and friends I was hurt and miserable after six operations and losing my best mate ever – my father Rudi – and my mother Jenni, who I couldn't save.

"It's only from the help of the peer support program and the close family at the MFB and friends and family outside that I have managed to keep it together."

Caleb is currently recovering from his sixth operation and awaiting a seventh operation, on left shoulder for the AC joint to be fixed and bursitis to be removed.

Despite injury, operations, and losing both parents, he's now looking forward and remains positive. He is strong inside but also credits family and friends, the peer support program, and psychologists.

Says Caleb: "It's not a weakness to ask for help – it makes you more of a man.

"And my door is always open to lend an ear and a helpful chat with anything you may be going through.

"I have learnt a lot from my continued adversity and would love to have the opportunity to help others as they did for me."

LIFELINE 13 11 14

UFUA International conference

POST TRAUMATIC STRESS AND FIREFIGHTING

The United Firefighters Union National Committee of Management hosted the “Post Traumatic Stress and Firefighting Conference in Melbourne in November.

PTS is severe anxiety that can result from exposure to any event that results in psychological trauma. It can result from a single episode or as a result of the cumulative effects of continual exposure.

The increased incidence of post traumatic stress for firefighters is increasingly recognised. But there is much work to do.

Post Traumatic Stress is an ongoing project for the United Firefighters Union with awareness and education the key to have the illness recognised and firefighters supported through presumptive legislation.

More than 110 attended the UFUA conference and were captivated with the calibre of the diverse presentations.

Union officials, firefighters, and fire agency Fire Chiefs and CEOs from around Australia welcomed the opportunity to hear from experts from the different perspectives and approaches.



Left to right: Victorian Minister for Emergency Services James Merlino, UFFW President Alex Forrest and Edmonton Fire Chief Ken Block.

United Fire Firefighters of Winnipeg President Alex Forrest and Edmonton Fire Chief Ken Block headlined the UFUA conference in Melbourne to outline and discuss the Canadian experience.

Canada once again has led the way with successfully lobbying to have post traumatic stress recognised as an occupational illness through presumptive legislation

UFFW President Alex Forest and Fire Chief Ken Block were both instrumental in the successful UFUA campaign for presumptive legislation to recognise occupational cancer federally and the States that subsequently enacted similar legislation.



Edmonton Fire Chief Ken Block in media interview

Once again we are very fortunate to learn from their invaluable experience.

The reality of living with post traumatic stress was powerfully presented by former Federal Police Officer Allan Sparkes CV VA. Allan candidly exposed the depths of despair and fear living with post traumatic stress and the journey it has taken his family. At times there was not a dry eye in the room.

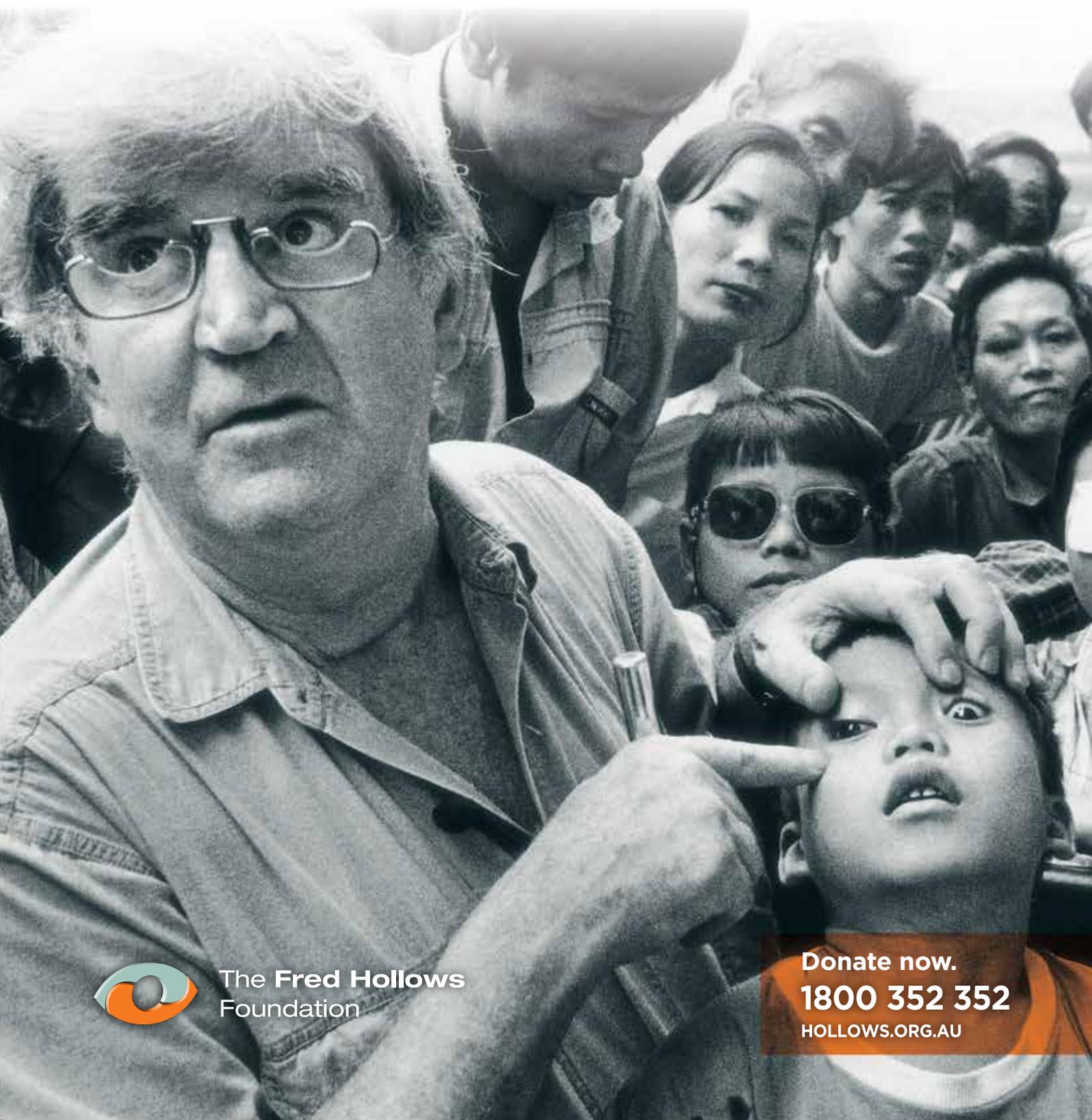
Former ETU Victoria Branch Secretary Dean Mighell followed with stories of hope. He has founded the Path of the Horse which assists veterans, police, firefighters and ambulance personnel with mental health through contact with horses.

The conference included leading practitioner and researcher Associate Professor Samuel Harvey. Associate Professor Harvey is the head of the University of New South Wales Workplace Mental Health Research Program, a Research Fellow at the Black Dog Institute. As a psychiatrist and epidemiologist he has a specific interest in the overlap between work and mental and physical health. He is currently undertaking research into mental health of emergency service workers including firefighters and has been involved in the development of a mental health strategy for first responders.

The wealth of knowledge and experience throughout the presentations was compelling. Importantly, as both firefighters, union officials and Chief Fire Officers were in the room learning together, the conversation will continue in the workplace.

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