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THE UFUA AVIATION BRANCH NEWSLETTER

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1. ADDING PERSONAL TRAVEL TO BUSINESS TRAVEL

The current EA provides at clause 4.9.1 (a) that:

“Domestic air travel will be economy class within Australia where the difference between published departure and arrival time is no greater than three (3) hours and business class (where available) where the difference between published departure and arrival time is greater than three (3) hours”

Members have contacted the Union advising that they are being told that they cannot stay on in Melbourne for the weekend/few extra days before returning home as there are FBT implications for ARFF in allowing employees to do this and, if employees elect to stay on they will only be returned home on economy class flights. Is this correct?

The Union has advice from two professional sources which say that advice to employees that they cannot add some personal travel to their business travel to attend workshops and courses in Melbourne due to FBT implications for AS/ARFF is incorrect.

A summary of the advice to the Union is:

- Under the Income Tax Assessment Act 1997 s8-1 the costs of a business trip are fully deductible if the primary purpose of the trip is related to producing assessable income. This is despite the existence of any incidental private purpose.
- Any private pursuits [staying in Melbourne for a few days after the completion of the workshop or course were incidental to the main purpose for the travel [attending the workshop/course:
 - The workshop/course is the dominant purpose for incurring the travel expense
 - If not for the training workshop the employee would not have travelled
 - The employee had no control over the time and place of training; and
 - The number of days devoted to business pursuits outweighs private days
- Application of the “Otherwise deductible rule” – the full amount of the trip would qualify as a deduction to any employee if they had paid the associated costs themselves and is irrespective of the class of travel [on this basis there is no FBT implication for Airservices].
- If Airservices paid for any private costs incurred in staying on for a few days after the workshop/course [accommodation, meals etc., then there may be FBT implications].

Airservices/ARFFS claims that if you ask to stay for a few days after the conclusion of your workshop/course causes them to incur FBT costs on your return flight do not appear to stack up.

Airservices/ARFF are not incurring any additional travel costs if you stay on for a few days after your workshop/course. The EA provides that where the published departure and arrival times for your flight are greater than three [3] hours, you are entitled to business class travel [where available]. This is an entitlement under the EA without any reference to any FBT implications for AS/ARFF and therefore unaffected by any tax or other implications for AS/ARFF.

2. LESSONS LEARNED NUMBER 1

UFU Lessons Learned

Emirates Airlines B777-300 A6-EMW

Aug 3, 2016 08:37hrs Dubai UAE flt EK521

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 aircrafts 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 that were 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.

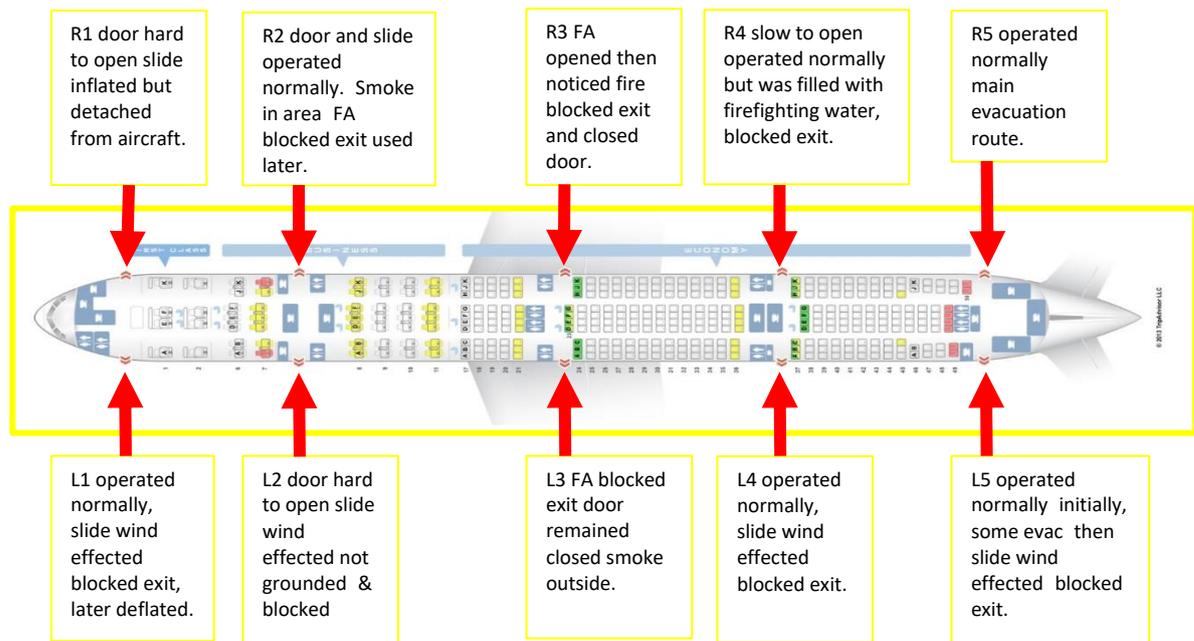
Passengers trying to retrieve carry-on baggage from overhead lockers impeded the evacuation.

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 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 mins 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 its 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 to 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.

3. PFCs CHEMICALS OF CONCERN PART 2

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.

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.

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)

PFOS 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) 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)

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 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.

4. WHS NEWS

Asbestos News

Drug trial showing positive results for lung cancer patients

Doctors at a Sydney hospital say a new drug is offering hope to lung cancer patients - including those with mesothelioma. The immunotherapy drug pembrolizumab, also known under proprietary name Keytruda, is being trialled at Westmead Hospital in Sydney's west as part of a global study running in 16 countries.

Long-time asbestos activist, and GBAN Australian Director Lou Williams has been on Keytruda since March 2015. She says in her *Living in Australia with Mesothelioma* blog: "In March 2015 I was on death's door. With a couple of weeks of living on oxygen 24/7, morphine, 42 kilos, red blood cells stopped producing needing blood transfusions, appetite non-existent, body shutting down fast and bed ridden. At a cost to us, I was given a lifeline to Keytruda. It brought me back to good health within 3 months, weight improved, appetite returned, no need for oxygen or high morphine meds giving me excellent quality of life and my life back! Tumours shrunk significantly and fluid decreased in peritoneal and pleural mesothelioma. I continued on Keytruda infusions every 3 weeks for 1 year." Lou has been a tireless advocate to have Keytruda fast tracked on the PBS for Mesothelioma (Asbestos cancer) and other rare less common cancers (RLC) and has a petition on change.org - *sign it now* if you haven't already.

PIN NOTICES

A PIN notice was rejected by management and handed back to me without action. I believe that under section 60 of the Act they are compelled to display it even if they disagree with it. Is this correct?

Yes, you are absolutely correct. The employer is obliged under section 60(4) (b) (ii) of the Act to display a copy of the PIN "in a prominent place".

But wait: there's more! if the employer 'rejects' the PIN, then he has the legal obligation to contact WorkSafe within 7 days of the PIN being issued. This then triggers a visit to the workplace by an inspector (usually two) who will inquire into the PIN and then make a decision about it (to confirm, amend or cancel the PIN). The employer cannot just hand the PIN back to the HSR and do nothing.

Emergency service workers: Increasing numbers of psychological injuries

An article in this week's *Age* has revealed that at least five Victorian police officers, paramedics and

firefighters are taking leave for psychological injuries every week, as new data shows worsening mental health among emergency workers. Workers compensation insurance claims for mental health injuries have surged 25 per cent in five years for emergency services personnel, with 305 claims lodged in 2015.

Psychological injuries now make up almost a quarter of all worker compensation claims from Victoria Police, Ambulance Victoria, the State Emergency Service and the state's fire agencies. This increase in claims comes at the same time as Victoria Police raises concerns about traumatic stress and suicides within the force, and carries a high-level mental health review. Three police employees have taken their lives already this year.

WorkSafe Victoria's chief executive, Clare Amies, told *The Age* that mental health problems were a serious issue in emergency service workplaces, and had become a "top priority" for the regulator. "These people go into work every day doing pretty tough things ... meeting people who are also going through bad situations," she said. "But it is the responsibility of the employer to make sure that there are systems and structures within that environment to reduce the risks of being physically or mentally injured, and supports in place if it does happen."

In the article, paramedic Al Briggs, explains how it wasn't one single incident, but a series of fatal incidents, which led to stress building up over time, consuming him, keeping him awake nights: "You just pick up ghosts," he said.

Read more: ['You just pick up ghosts': mental health crisis deepens for emergency workers](#) *The Age*