

Senate Inquiry Submissions

Contents

Introduction.....	3
BA Procedures	3
Heat Stress.....	4
Distress Signal Unit (DSU)	4
BA Communications	5
Disc Cutter- Husqvarna 970.....	5
Lukas Electronic Rescue Unit (ERU)	6
Ladders	6
Operational Hose.....	7
Operational Hose Carried for Category 5	7
ARFF Vehicles.....	8
Driving Course- Mount Cotton	8
Off Airport Driving	9
Public Awareness.....	9
International Civil Aviation Organisation (ICAO)	9
Task Resource Assessment (TRA)	10
Airservices Charges for Provision of ARFF	11
Aviation Rescue Fire Fighting Service funding.....	11
The Role of ARFF- Water Rescue Service- AMSA Dispensation	14
Adelaide ARFF Provision of Service during Curfew.....	15
Summary of aircraft movements during curfew	16
Regional Operations Manager (ROM) Steve Davies.....	16
Alternate Airport- during curfew.....	17
Adelaide ARFF Operational Legislative Failures at Category 5 Level	18
ARFF Provision Failure #1	18
Details of Failure	18
ARFF Provision Failure #2	19
Details of Failure	19
ARFF Provision Failure #3	19

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Details of Failure	20
SAMFS Response times.....	21
ARFF Provision Failure #4	22
Details of Failure	22
Summary of Provision Failures	22
Recommendations.....	23
Metropolitan Fire Service (MFS) vs ARFF (Adelaide curfew)	23
Example:	24
Category Comparison	25
Example	25
Automatic Fire Alarms (AFA's).....	27
Recent Example	27
Airservices Contract Positions	28
Relationship between Airservices and CASA (and AMSA)	28
AMSA dispensations	30
Airservices Restructure.....	30
Conclusion	31

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Introduction

Dear members of the Senate Inquiry,

I would like to introduce myself; my name is Glen Barker, recently retired Fire Commander, who served at various locations with Airservices Australia, Aviation Rescue Fire Fighting service. With respect, I would like to submit the following submission which meets the “Terms of Reference” parts A, B, C, D, E, F, G, and H.

The purpose of this submission is to provide the Senate Inquiry with a factual statement on behalf of Adelaide Aviation Rescue Fire Fighting (ARFF) interested staff. The contents of this submission, although lengthy, highlight the deficiencies, breaches of regulations and standards, as well as cost cutting within the organisation, all at the expense of safety.

At the time of submitting this document it is acknowledged that Airservices has started ‘trying’ to implement improvements in an attempt to diffuse the severity of some of the non-compliance issues. That being said all of the issues identified below have been outstanding for some time, years in some instances, and now only being addressed due to the impending Inquiry.

Airservices has an appetite for risk. It would seem that senior management are happy to accept that risk and feel safe enough within their position to compromise the organisation they work for based on a mentality that ‘nothing will go wrong’. When the workforce are repeatedly crying out for more staff, more resources and better compliance with governing documentation who are Airservices to deny action. Although ARFF have responded to many aviation incidents, Australia is ‘lucky’ to have avoided a major aircraft crash or incident. This complacency has infiltrated Airservices and decisions are being made based on the likelihood of ‘nothing’ happening rather than ‘in all probability, one day it will’.

BA Procedures

- ARFF implemented a nationwide training program that was delivered to ARFF stations throughout Australia in late 2018.
- The intent of this procedural change was to bring ARFF in-line with other fire and rescue services.
- Staff who delivered the training were seconded from operational positions and report to the Chief Fire Officer.
- Throughout the delivery the trainers advised this was fully endorsed and supported by the ‘Office of the Chief Fire Officer’.
- All travel, accommodation and associated costs were borne by Airservices to roll this program out to all 26 ARFF locations throughout Australia.
- Adelaide during curfew provides a Category 5 service which does not enable ARFF to implement BA search, rescue and firefighting procedures.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Note:

ARFF acknowledged that there was a need to review current practices and adopt new BA procedures. This was to increase firefighter safety, manage heat stress and fatigue issues. This would also bring ARFF in-line with recognised standards used by other emergency services. For some reason the roll out stalled and we have been told to keep working with the old procedures. Staff know, as they have all undertaken the new training, that the current BA procedures are not safe and compromise ARFF's ability to undertake rescue operations. Is this a logistical or financial issue? Either way it is compromising safety. ARFF crews cannot implement BA procedures when at Category 5 during curfew period. This forces Adelaide ARFF to take up defensive external firefighting until the arrival of the Metropolitan Fire Service (MFS). This is more embarrassing than not being able to climb a ladder more than 2m off the ground!

Heat Stress

- ARFF acknowledge that BA use in a hot environment causes the core body temperature of a firefighter to increase. The new BA procedure addressed this issue and restricted the BA user to a single use (one cylinder) operation. Whilst ARFF stall on the roll out of the new BA Procedure staff are being put at risk as they do not have the resources (manning and equipment) to work in a safe manner during an incident.
- ARFF have brought in a new hydration plan which requires staff to drink frozen (slushy) drink prior to and post training. The guidelines require the staff member in charge of training to weigh all staff prior to undertaking the training, ensure they consume enough slushy based on body weight, weigh staff again after exercise, work out body weight loss and ensure they consume more slushy. Amount of slushy to be consumed is worked off a simple chart. The mixture staff are required to consume is not only full of sugar (12 teaspoons per 600ml) but has a fluorescent orange colour added for appeal. Many staff have indicated concerns with being told what to consume especially with regards to health studies based on sugars and colours.

Distress Signal Unit (DSU)

- ARFF continue to use the current issue DSU which has been in service for many years. This is despite advice on the manufacturer's website which states "not for use by fire and rescue services" which is no longer viewable. The Super Pass II now comes with a notice stating, 'The SuperPASS2 is no longer NFPA compliant for Fire Fighter use and has been replaced by the SuperPASS5 and SuperPASS5X'.
- ARFF are not only aware of this issue but have failed to seek an alternative DSU to comply with safety regulations.
- Rather than sourcing a compliant DSU ARFF have sought dispensation through CASA to "not comply" with the standard and be able to continue their use.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- Is this a decision based on a financial constraint at the cost of safety? The technology is out there so why seek dispensation through the regulator?

BA Communications

- Retrofit BA communication equipment, utilising existing UHF portable radios and bone mic, have been removed from service with no replacement provided.
- Current BA communications consist of using the same UHF portable radio without the bone mic.
- Communications from BA team/s (internal) to Officer in Charge (external) has always been plagued by poor quality.

Note:

Communication is vital to managing an emergency, however, ARFF BA communications are hindered by audibility, dead spots in and around the airports, functionality and having to carry an extra piece of portable equipment into the fire zone. There are fully functioning BA communication systems available to the industry that would improve safety. Instead, ARFF have pushed on with this sub-standard system compromising the safety of firefighting crews. When in a blast furnace with zero visibility, crawling on hands and knees through black toxic smoke, communications are everything.

Disc Cutter- Husqvarna 970

- ARFF removed the Husqvarna 970 rescue saw from service despite being mandatory for compliance with Category requirements. *Ref: AFFM-CT, 3.1 Minimum Equipment Listing for Category.*
- No replacement has been sought.
- Removed from service mid 2018
- CASA dispensation?
- It is a requirement for each ARFF station to carry Disc Cutter. As all have been removed from service all ARFF stations are non-compliant.

Note:

During the recent Senate Estimates hearing, conducted 18th February 2019, ARFF Chief Fire Officer (CFO) Glenn Wood told the committee that the removal of the Disc Cutter was due to safety concerns for staff. Another reason given was that this saw was “old technology”. These Husqvarna Disc Cutter saws were brought into service to replace the previous STHIL models back in Oct 2015. The Senate Estimates were also led to believe that the removal of this Disc Cutter was of no real concern as we also carry the “jaws of life”. Albeit true that we carry “jaws of life” or, more specifically Lukas Electronic Rescue Unit (ERU), the purpose of the rescue saw cannot be filled by the

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Lukas ERU. It is like trying to draw a conclusion that you can carve a roast leg of lamb with a butter knife because a knife is a knife.

Lukas Electronic Rescue Unit (ERU)

- As part of the transition from the older equipment the new ERU was to include and sharps and glass management kit.
- This ERU has been in operational service since early 2018. As of today the rest of the kit has not been implemented despite being listed on documentation.

Note:

Another classic example of Airservices only doing half of a job. The glass management and sharps kit is a vital component of the package. Staff are left to be creative to manage these inherent risks when using the ERU in training or operational environments.

Ladders

- Removal of ARFF ability to train on operational ladders above the height of 2 metres.
- Obvious issues with skill fade.
- No provision of alternative equipment such as platforms, air stairs, etc.
- No local agreements in place with airport or airlines regarding utilising their equipment.
- Lack of equipment available at smaller airports.
- ARFF not trained on other company's equipment. Who is going to drive and position the air stairs on an operational response?
- Non ARFF staff are not allowed to enter the hot zone

Note:

During the latest Senate Estimates hearing, on 18th February 2019, ARFF CFO Glenn Wood confirmed that ARFF staff were not allowed to climb ladders above 2 metres. Representation by the CFO made it sound as though ARFF do not need to train higher than 2 metres and that alternative means such as 'Air Stairs' were available. Airservices do not have a vehicle (Air Stairs) in operational service. The intent being that when it is ready it will be placed at the Learning Academy for staff familiarisation. There are no local agreements in place to use equipment from another company. There would need to training provided to use any equipment made available for ARFF use. In the event of an aircraft emergency ARFF are the only people allowed in the hot zone as we are the combatant authority and have the appropriate level of PPE. Logistically there are no procedures in place to bring Air Stairs to the scene. What if the aircraft crashes off the runway, off the airport or in a spot where Air Stairs can't access?

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Operational Hose

- Hose testing not meeting Australian Standards.
- New hose testing procedure requires hose to be sent to external agency.
- Insufficient operational hose held on station to comply with the requirement to send hoses away for testing.
- ARFF rather than coming up with a fix sought dispensation from CASA.

Note:

When ARFF became aware that in house hose testing did not meet the Australian Standard they decided to seek dispensation from CASA to “not comply”. This request was to enable ARFF to ‘not comply’ with an Australian Standard. If this was granted then CASA and ARFF would be in breach of the Australian Standards. Firefighters using equipment need to know that it is fit for purpose and that it reaches or exceeds the applicable standard. That is why there are standards and regular testing regimes. By requesting dispensation shows Airservices are willing to compromise or relax standards to save money at the cost of safety.

Operational Hose Carried for Category 5

- Insufficient hose carried on a single vehicle to meet Category 5 requirements.
- *AFFM-CT-Minimum equipment listing for Category-section 3.1* Details what equipment needs to be carried to meet each Category.
- It was identified that Adelaide did not carry enough operational hose during curfew whilst operating a Category 5 service. The Mk8 vehicle is short of 2 x 64mm hose and 2 x 50mm hose.
- The Mk8’s need an engineering solution to accommodate the extra hose as there is currently no available space to fit them.
- The interim measure is to run 2 x Mk8 vehicles until a solution is found.

Note:

It was only identified when Adelaide staff were forced to fight to stop Airservices reducing staff numbers overnight during the curfew period.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

ARFF Vehicles

- Unable to use lights and sirens when responding on public roads.

Note:

The vehicle collision which occurred in Darwin 2011 between an ARFF Mk8 fire truck and a passenger vehicle, claiming 3 lives, has seen ARFF drag its feet to implement the recommended changes derived from the Coronial Inquest. 7.5 years after the incident staff are responding to emergencies without being able to be recognised as an emergency service. Lights and sirens can only be used if the incident involves an aircraft within our response area. It is ludicrous to think that we cannot respond under full lights and sirens when responding to real life situations that require our involvement. If we are mobilised it is for a reason. This could be for a medical episode, someone having a heart attack, a car crash with people trapped, an explosion at one of the many industrial areas we cover or even a fire in a building with people inside and unaccounted for.

Driving Course- Mount Cotton

- After the Darwin incident all operational staff were requirement to undertake an advanced driver training course.
- Initially conducted at Mount Cotton, QLD. Then some done out in WA and Avalon.
- Due to financial reasons not all training was delivered at a designated driver training facilities.
- This led to some staff not being able to drive the Mk8 vehicles at speed on simulated roadways.
- Staff who volunteered and became Emergency Vehicle Instructors (EVI's) to enable ongoing training back at home stations only ever sat one course.
- Operational staff have only ever completed the initial course with no refresher training provided.
- Since the course was delivered there have been several new starters/recruits come through who have not experienced the full driving program.

Note:

After staff completed the course there has been little to no follow up actions. In light of the seriousness which led to ARFF having to undertake this training it would seem now that they have ticked that box off they have little interest in maintaining the acquired skills. It is worth mentioning that many employees do not have much experience with driving Heavy Rigid (HR) vehicles. Many attain their HR license to get in to the job. Continuous driver training on-the-job should be paramount to ensure the safety of ARFF employees and other road users.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Off Airport Driving

- Originally part of the 'be out there and be seen' to enable the public to recognise we are a fire service.
- Conducted once every 90 days per employee with a designated Emergency Vehicle Instructor (EVI) to assess competence driving on public roads.
- There has been no further training delivered to employees since the initial roll out. This includes the EVI's.

Note:

An Off Airport drive lasts around 30 minutes, driving under normal driving conditions which does nothing to improve understanding of vehicle dynamics, characteristics and/or driving under response conditions. Other than being seen on the road by other road users it does not improve or even maintain competence in driving a 30t fire vehicle under emergency response conditions.

Public Awareness

- There has been no attempt made by Airservices to promote ARFF and its vehicles as recommended post Darwin Incident.
- Airservices seems to think that seeing an occasional fire vehicle on the roads around the airport is sufficient to educate the general public who we are and what we do.
- There have been no media campaigns to promote ARFF and our vehicles. This was a recommendation post Darwin Incident. There are no posters or billboards up around the airport to educate the public.

Note:

As with all things to do with the findings of the Darwin Incident and the recommendations that were put to Airservices, it would seem that over the past 7.5 years since the accident the resolve of Airservices has waned and has resorted to ensuring we tick boxes rather than ensure an incident like this never happens again.

International Civil Aviation Organisation (ICAO)

- In 2015 ICAO reviewed and updated the amount of agent required per category level.
- This changed the required amount of water to be carried on Fire Vehicles at a Category 9 service from 24,300 litres to 27,859 litres.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- Airservices, who is a signatory to the ICAO standards, maintain the current level of 24,300 litres as detailed in *Civil Aviation Safety Regulations, MOS, Manual of Standards, Part 139H*.
- ICAO's updated minimum for water has been in effect for over 3 years.
- Airservices have not implemented this revision and maintain the *Civil Aviation Safety Regulations, MOS, Manual of Standards, Part 139H*

Note:

Airservices are a signatory to ICAO, as such, compliance with the standard should be reviewed and amended. *Civil Aviation Safety Regulations, MOS, Manual of Standards, Part 139H-Standards Applicable to the Provision of Aerodrome Rescue and Firefighting Services, (Version 1.2: January 2005)* needs to be revised to align with the overarching standard. Having conflicting documents enables misinterpretation and variance from the required standard. Case studies of recent incidents highlight the need to carry more water to successfully see an incident through to a conclusion. For example: Dubai Boeing 777, crash on landing, Flight EK521.

Task Resource Assessment (TRA)

On the 15th of May 2018 the Minister for Infrastructure and Transport, Deputy Prime Minister, the Honourable Michael McCormick wrote to the UFU Branch Secretary confirming that the Civil Aviation Safety Authority (CASA) recognises; "the ICAO Task Resource Assessment (TRA) process as their preferred approach to determining operational staffing numbers for ARFFS delivery" and that, "CASA has advised Airservices that they should complete ARFFS STAFFING ASSESSMENTS based on the ICAO standards and recommended practices related to the TRA process".

- ARFF are yet to conduct this TRA process and there is much conjecture as to what model they intend to use.
- Airservices Risk Management System has a demonstrated history of reaching a predetermined outcome thus bringing the TRA process into question.
- Airservices have demonstrated that cost cutting and seeking dispensation from the regulator is their preferred choice over safety.
- Discussions regarding Perth, Brisbane and Adelaide have all been about cutting manning and cross crewing rather than providing a service in as safe a manner as possible.

Note:

Throughout Adelaide's fight for not dropping manning during the curfew period Airservices kept pushing alternate rosters. This 40% cut to firefighting staff during curfew hours was constantly being denied by Airservices when being questioned by the Senate Estimates Committee. Towards the end of 2018 Adelaide staff were being bombarded with alternate rosters (printed and placed around station), having meetings to 'review' Adelaide's Safety Case to justify why we had extra firefighting staff overnight and countless discussions based on what we 'should' be doing. All the while our CEO and Chief Fire Officer denied any intent to change Adelaide manning.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Airservices Charges for Provision of ARFF

- Airservices charge airlines for provision of ARFF services based on Maximum Take Off Weight (MTOW) in conjunction with the Category of aircraft for each landing. The aircraft must be 5.7t or over to attract the charge.
- This is based on any aircraft landing regardless of use. There is no distinction between aircraft carrying passengers or aircraft carrying freight.

Note:

During Airservices attack on Adelaide's roster within curfew hours it was highlighted that aircraft that meet the criteria and attract landing charges for ARFF coverage were not being taken into consideration. If an aircraft is being charged by Airservices, using Airservices' own landing charge calculations (*ref: Contract for the provision of aviation facilities and services- 01 April 2017*), then it would be safe to conclude that the aircraft owner/operator would assume they are being covered by ARFF services. To have Category 6 aircraft landing with on Category 5 service in place should be seen as either overcharging the customer or more likely failing to provide the correct level of Category. This would then be considered a matter of non-compliance.

Aviation Rescue Fire Fighting Service funding

A proposed idea to improve aviation charges used by Airservices for the provision of Aviation Rescue Firefighting is to review, then implement, a simpler and more transparent funding model.

At present ARFF services are paid for through landing charges. This is calculated using the aircraft Category in conjunction with Maximum Take Off Weight (MTOW) of the landing aircraft (5.7T or more). Airservices has stated on several occasions that the pricing model is under review but it has once again been put on a 2 year hold.

Back in Feb 2016, Then Union Secretary Henry Lawrence stated in a letter to ARFFS Regulatory Policy Review and the Department of Infrastructure and Regional Development, Canberra with the points and reference;

- The UFU commissioned the Newcastle University Centre of Full Employment and Equity Report (*the COFFEE Report*) to provide comprehensive and independent research into the critical issues raised in the Review consultation paper.
- The *COFFEE Report* analyses the implications of the proposals outlined in the Review consultation paper in terms of national and international requirements and obligations and the likely impact on public safety.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- Part 1 of the UFU submission (below) has been organised reflecting the structure of the Public Consultation Paper including headings.

Part 8.3 How should ARFF services be paid for?

It is clear from the submissions made to past enquiries that have looked into this matter, that the greatest opposition to the wide scale provision of quality ARFF services in Australia, particularly at our regional and general aviation airports, has been the extent to which the major carriers have resisted a networked pricing structure, where the costs of the whole system are equally borne by all locations. They have argued on the basis that doing so would distort investment decisions if ARFF and ATC services were privatised at some future date. The introduction of location specific pricing delivered cost reductions to airlines operating from capital cities and motivated the general aviation community, despite having far higher accident rates, to lobby for the withdrawal of the services. Representatives of major airlines have also made tokenistic calls for regional airports to be covered by neighboring town fire brigades, presumably aware of how ineffectual the suggestion was likely to be.

Parliamentary committees who considered the issue in 2001 and 2003 recommended that the services be funded through some form of cross subsidised arrangement, or universal surcharge, and while location specific pricing has been significantly abandoned in the ASA pricing structure, the current review continues to reflect the sentiment that ARFF are a luxury that regional and general aviation airports cannot afford. Clearly, the way we pay for aviation rescue firefighting services influences the resistance to their establishment.

The provision of ARFF services should ideally be paid by stakeholders in proportion to the benefit they derive from their provision, which can only be roughly estimated. It needs also to be very sensitive to a capacity to pay.

The passengers and air crews arriving and departing from an airport with an ARFF service are probably the principal beneficiaries of its presence because it enhances their safety.

The airline operators benefit from the protection of their aircraft and staff, while airport operators whose airports are made safer also benefit.

The tourism sector also benefits from the investment in aviation safety because it makes tourist destinations more attractive and diminishes the risk of a market decimating disaster.

The nation as a whole also derives a strategic benefit in having a skilled and equipped emergency response capability maintained around the nation's airports that can be called upon in special circumstances to help deal with other catastrophes and crises at a local or national level. ARFF teams have been deployed in life threatening emergencies such as bushfires, and to have the available skills pool supplementing our national emergency response capability is of strategic benefit to the country as a whole.

These services should therefore be funded from a national levy on air travelers, of around seven dollars per landing at airports with ARFF, which if applied to the airports currently with an ARFF

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

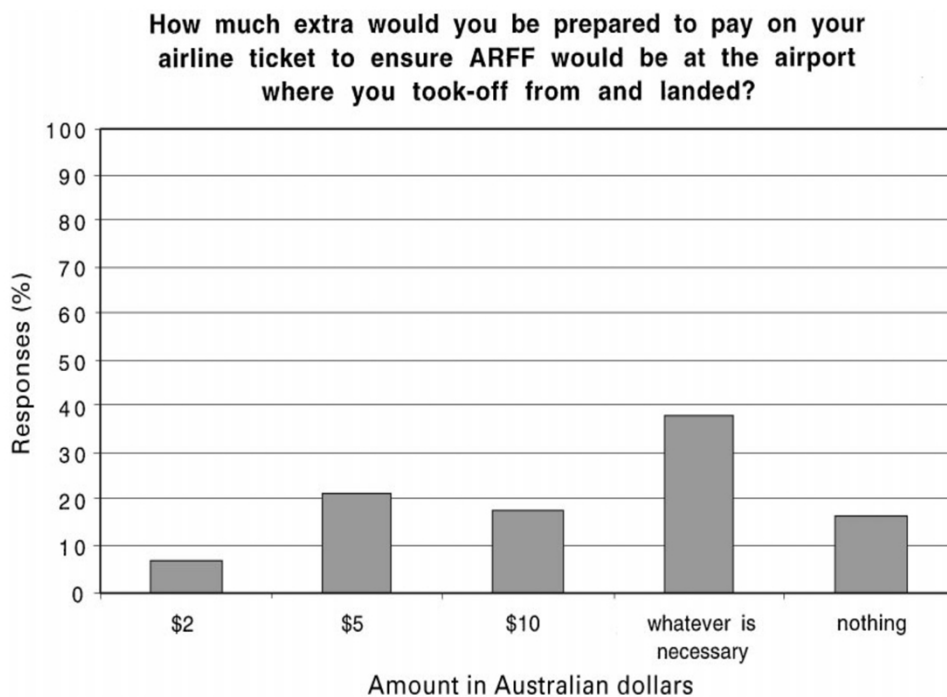
establishment would raise about \$495 million using 2014-15 annual passenger movement data (BITRE, 2015). Airlines should pay the levy for their crews and non-paying passengers.

Any net surplus over operating costs should be invested in the establishment of services at new airports, in order of airport category and traffic levels.

This is consistent with recommendation 17 of the 2003 House of Representatives Standing Committee on Transport and Regional Services (SCTRS, 2015).

As to how the travelling public would respond to the suggestion, we have the survey of over 1000 Sydney air travelers conducted by Braithwaite (2001), who when asked 'how much extra would you be prepared to pay on your airline ticket to ensure ARFF would be at the airport where you took off from and landed?', over 75% agreed to the extra surcharge (See Figure 3).

Figure 3: Public willingness to pay a universal fee for ARFF



Source: Braithwaite (2001)

In addition to this source, the Commonwealth should provide supplemental assistance for the establishment of new services and facilities, reflecting the broader economic and strategic benefits the community derives from moving progressively toward safety compliance with the international standard.

The above Coffee report was in line with a United Firefighters Union of Australia, Aviation Branches Campaign at major East Coast Australian airports during the latter part of the 1990s. The charge was called a "Passenger Facilitation charge". The charge was the amount of \$2.00 on every ticket sold.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

The survey Questions asked were;

Do you, (the flying public):

- Know about ARFF Services?
- Know where ARFFS services are provided?
- Know we're Services are not provided?
- And would you support a \$2.00 surcharge on your plane ticket?

The Feedback during this Mid 1990s survey was very positive and in line with the Coffee Report.

We, in Adelaide, believe that including the service provision charge as part of the ticket price would not only provide the required funding for ARFF to operate a safe and efficient service but also have the positive effect of having transparency which would better promote who we are and what we do.

Although previous reference was in relation to a \$2 per ticket charge during the 1990's we fully understand that in 2019 this fee for service will likely need to be adjusted. The major benefit being that the cost of having a dedicated ARFF service would be borne by the flying public rather than imposed on the Aircraft owner/operator.

The Role of ARFF- Water Rescue Service- AMSA Dispensation

- The role of ARFF is to intervene at an aviation incident/accident/emergency in the following 3 areas:
 - Aircraft emergencies on the aerodrome and within our mandated response area
 - Infrastructure and buildings
 - **A Water Rescue Service (WRS)/ Difficult Terrain Operation (DTO)**

Note:

Adelaide ARFF meets the criteria for all 3 and as such provides a 6.9m Sailfish rescue boat to be able to deploy life rafts in the event of an aircraft crash over water. Our WRS vessels have increased in size from a 4.2m Inshore Rescue Boat (IRB) to 5.3m, then 5.5m and now 6.9m twin hull Sailfish. For many years staff only needed to have a state boat licence to operate on the WRS. As we are classed as a 'Commercial Vessel' we are supposed to hold a Coxswain Certificate which requires hundreds of hours on the water. Airservices sought and subsequently gained approval from AMSA for staff to attain a Limited Coxswain certificate which lasted 5 years. As the expiry date for the licences were looming Airservices once again sought dispensation from AMSA for Airservices to be exempt from requiring anything more than a recreational boat licence. This was also granted. Adelaide is only one of 13 ARFF locations who are required to provide WRS and of those 2 are now exempt from holding a Limited Coxswain Certificate. Airservices constantly seeks dispensation to circumnavigate required standards and in this case from AMSA not CASA.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Adelaide ARFF Provision of Service during Curfew

- Category 5 service provision advertised even though Category 6 aircraft movements are scheduled.
- Current manning for Adelaide ARFF during curfew is 1 Officer and 4 firefighters using 1 Mk8 Fire Vehicle. This is 2 x extra Firefighters over Cat 5.
- Airservices are still planning and currently looking into alternate Rostering to cut staff back to 1 Officer and 2 Firefighters in line with Category 5 requirements.
- Insufficient manning and resources to deal with a full emergency.
- Non-compliance with obligations under *CASR-MOS- Part 139H*.

Note:

Adelaide ARFF Provide a Category 5 level of service during curfew hours as advertised in *En Route Supplement Australia (ERSA)* and *NOTice To Air Men (NOTAM)*. *Civil Aviation Safety Regulations (CASR)*, *MOS - Part 139H - Provision of ARFF services; Operation Manual –Part 139H (Aerodrome Rescue Fire Fighting Services)*; and *Airservices Ops-005* prescribe a manning level for Category 5 as being one Officer-In-Charge (OIC), two Firefighters and one Vehicle. Current manning during curfew consists of one Officer and 4 firefighters using one Mk8 fire vehicle. ARFF are actively pursuing alternative rostering to bring staff numbers back in line with the advertised Category 5 requirements. In the event of an incident requiring ARFF intervention the resources for Category 5 are nothing short of dangerous and compromise the safety of the crew and people who need to be rescued. Reliance on the Metropolitan Fire Service (MFS) to respond and provide back up to ARFF is a failure of Airservices Safety Management System to identify risks such as;

- incompatibility of equipment and standard operating procedures
- lack of LOA/MOU arrangements to capture the extra shortfall created by lack of manning and resources by Airservices
- Airservices have the regulatory responsibility to provide a compliant ARFF service. If this is not achievable without engaging local MFS/ external agencies then the SMS should have picked up that ARFF resources are insufficient.
- MFS/ external agencies should not be used to prop up Airservices misinterpretation of regulatory requirements.
- Why has CASA, as the regulator, not identified this deficiency?

According to State Government data there are over 300 aircraft movements per month at Adelaide airport during the curfew period. That equates to 3600 per year and growing.

Ref: <https://infrastructure.gov.au/aviation/environmental/curfews/AdelaideAirport/files/Adelaide-Airport-Curfew-Factsheet.pdf>

The curfew does not prevent all aircraft movements during the curfew period. It limits aircraft movements between 11.00pm and 6.00am by restricting the types of aircraft that can operate, the

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

number of flights permitted and the types of operation allowed. This enables a number of vital aviation services to be provided while limiting the effect of aircraft noise during curfew hours. On average, there are 10 aircraft movements per night during curfew hours, of which seven involve emergency services aircraft.

Summary of aircraft movements during curfew

Low noise heavy freight	737, Bae 146	Cat 6	160 per month
Less than 34,000kg propeller	Various	Cat 5 (or less)	79 per month
Over 34,000kgs low noise jets	Various	Cat 5 (or less)	6 per month

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.

Regional Operations Manager (ROM) Steve Davies

Airservices have been actively trying to reduce the manning and resources provided overnight during the curfew period. Throughout this onslaught Adelaide staff have been forced to defend against alternate rosters, review of the current Safety Case and Safety Management System with the intent of maintaining a safe working environment.

Western Regional Operational Manager Steve Davies, who is responsible for WA, SA and NT, came to Adelaide ARFF station between 26th and 28th September 2018 as part of a scheduled Station Visit. ROM Davies held 2 meetings during the visit. The first was held in conjunction with an existing Officer's Meeting and the second held with the operational duty crew, that being Team 6 and Team 7. Mr Davies clearly stated that Adelaide's manning during curfew was being reviewed with the intent to reduce staff numbers, therefore, cutting staff overnight by 40% from 1 Officer and 4 Firefighters to 1 Officer and 2 Firefighters.

It was asked at these meetings, "*what would happen to these personnel taken off night shift?*" Mr Davies categorically stated that "*these staff will go to a 'Day Shift' roster to cover unplanned sick leave*" therefore saving ASA/ARFF money.

This statement is in complete contradiction when Senator Gallacher, Senate estimates 2018 questioned Airservices EGM Mr Harfield (*ref: Senate Estimates 22/10*);

22:13:45 SG- "*is this a cost cutting exercise Mr Harfield?*"

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- JH- *“no senator”*
- SG- *“you save any money as a result of it”*
- JH- *“allows us to look at our resourcing profile around the country”*

Alternate Airport- during curfew

- Adelaide ARFF is also nominated as an alternate airport for both Domestic and International flights
- These aircraft range in category up to Cat 10 Airbus A380.
- The presumption is that off duty staff can be recalled in time to increase Category.
- If Category increase can't be made prior to ETA the pilot decides as to whether to land or not

Note:

Aircraft regularly divert to Adelaide for a variety of reasons such as, but not limited to;

- Medical Emergency on board
- Technical/ mechanical issue with aircraft
- Bad weather at original destination i.e. fog at Melbourne

In most instances recall of staff can facilitate a higher level of service provision, however, it is rare that Adelaide can make the required Category based on the aircraft type. With impacts such as available time constraints, response from off duty staff, proximity and availability of staff. In the event Category cannot be raised prior to the aircraft arrival ARFF are left to cover with Category 5. This equates to 1 Officer, 2 Firefighters and 1 Vehicle.

Adelaide ARFF Operational Legislative Failures at Category 5 Level

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- Inadequate ability for the provision of a Category 5, Aviation Rescue Fire Fighting Service at Adelaide Airport during the curfew period, (2300-0600hrs) as legislated requirements from *Civil Aviation Safety Regulations, Manual of Standards, MOS Part 139H – Standards Applicable to the Provision of Aerodrome Rescue and Fire Fighting Services*.

Note:

Category 5: **1 Vehicle** Ref: CASR, MOS, Part 139H, Provision of ARFF services

3 Crew consisting **one** Officer and **two** Firefighters Ref: Operation Manual – Part 139H (Aerodrome Rescue Fire Fighting Services) and ARFF OPS-005 - Service Provision for Temporary Change to Category.

ARFF Provision Failure #1

Ref: CASR, MOS, Part 139H, 3.1.2/Aerodrome Category; Clause 3.1.2.2

“The correct level of ARFFS protection shall be available at all times that the ARFFS is operational. ARFFS providers are required to maintain periodic checks on all aircraft operations to ensure the correct category is supplied”

Ref: CASR, MOS, Part 139H, 6.1.1/Response Time: Clauses 6.1.1.3, (a, b)

(a) “The operational objective of the ARFFS is to achieve a two minute response time to the end of each runway”.

(b) “The operational objective of the ARFFS is to achieve a response time not exceeding three minutes to any part of the movement area”.

Definition of Aerodrome – “A defined area of land or water, including any buildings, any installations, and equipment intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft” (Ref-CASR, MOS, Part139H, Section 1.2:Definitions)

Details of Failure

Failure of Adelaide ARFFS to provide Category 5 level of service “**at all times**”, (MOS Clause 3.1.2.2), when responding to aerodrome incidents, i.e. Automatic Fire Alarms (AFA’s), first aid calls, MVA’s, etc. (other than aircraft incidents), thus failing to meet response times, (MOS Clause-6.1.1), for aircraft coverage as required by the regulations.

When at Category 5 the Fire vehicle and crew can be dispatched to an emergency call, be that on the airport or within their response area off airport, leaving the Airport at Category 0 with no ARFF coverage.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

ARFF Provision Failure #2

Ref: CASR, MOS, Part 139H, Chapter 10: Safety Hazard- Risk Management and Safety Hazard Systems- Section 10.1.1- Operational Risk Assessment- Clause 10.1.1.3

Clause 10.1.1.3 - “ARFFS staff must have the knowledge, equipment and training to effectively respond to any hazard on the aerodrome as a result of the risk assessment carried out for the aerodrome”.

Definition of Aerodrome – “A defined area of land or water, including any buildings, any installations, and equipment intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft” (Ref-CASR, MOS, Part139H, Section 1.2:Definitions)

Service delivery – Ref: CASR, MOS, Part 139H, Section1.2-Definitions - “The act of allocating aerodrome rescue and firefighting service facilities, equipment and resources to support the infrastructure and activities of a Provider”.

Details of Failure

Failure of ARFF services to maintain the provision of a licensed Category 5 service delivery for aircraft during landing/take off operations between airport curfew hours, whilst simultaneously, “to effectively respond to any hazard on the aerodrome”.

Adelaide ARFF has demonstrated a failure to provide adequate Category 5 coverage during curfew hours when airport is operating and there are aircraft movements. ARFF responding to non-aircraft emergencies are forced to leave the airport at Category 0 which leaves aircraft movements with Zero coverage in the event of an emergency.

Repeated failures of Adelaide ARFF, at Category zero has demonstrated a gross misinterpretation and understanding of the above clause and places any current risk assessment in legal doubt. Such failures also demonstrates the ARFF risk assessment not fully encapsulating the current level of ARFF service required to effectively respond to hazards of a major international capital city airport.

ARFF Provision Failure #3

Ref: CASR, MOS, Part 139H, Chapter 11- Interface Arrangements with State or Territory Fire Brigades & Other Third Party Providers Section- 11.1.1- Interface Arrangements: Clauses 11.1.1.2 & 11.1.1.3

11.1.1.2 – The interface arrangements contracts, service level agreements or memoranda of understanding must be in place and address requirements to accept service and data from service providers external to its own operation.

11.1.1.3 – The interface arrangements must seek to ensure the integrity and reliability of the data or service being accepted.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Service delivery – Ref: CASR, MOS, Part 139H, Section 1.2-Definitions - “The act of allocating aerodrome rescue and firefighting service facilities, equipment and resources to support the infrastructure and activities of a Provider”.

Details of Failure

Third party arrangements via MOU with South Australian Metropolitan Fire Service, (SAMFS), have been developed and expanded over the last twenty years with Adelaide ARFF, Airservices Australia due to the development of infrastructure at Adelaide Airport.

Consequently much of the responsibility for landside infrastructure and assets, with regard to service delivery of fire protection services have been cost shifted by Airservices to the South Australian state government and the MFS.

At Adelaide Airport, ARFF services have placed further reliance on external service providers to meet the under resourcing and cost shifting which has occurred over the past two decades, such as no Domestic Response Vehicle (DRV). Adelaide ARFF respond to Automatic Fire Alarms (AFA's), motor vehicle accidents, first aid calls, etc. on a regular basis utilising a Mk8 Fire Vehicle which forms part of the advertised Category. Other ARFF locations around Australia that operate a Category 9/10 level of service have a DRV at their disposal to maintain advertised Category for aircraft movements.

Under resourcing and cost saving has also resulted in Adelaide ARFF failing to maintain Category 5 (during curfew) and Category 9 (non-curfew hours) compromising its ability to comply with Regulations.

It places an emphasis on response times and the availability of external resources “at all times”. External providers do not have the same regulatory requirements which bind them to respond to an aviation incident, or observe each aircraft movement, or commit to respond as per the *CASR, MOS- Clause 11.1.1.3*. This questions the validity of Airservices SMS and risk assessments, especially throughout the curfew period.

SAMFS Response times: MOU arrangements estimate the times that MFS can, if available, be at the perimeter gate being estimated at:

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- From Adelaide Headquarters - **10 minutes/9km/5 vehicles**
- From Brooklyn Park – **5 minutes/3.5km/1 vehicle**
- Camden Park – **10 minutes/10km/1 vehicle**
- To Airside incident site- **At least 5 minutes**

A second reference to MFS response time to the gate was through E-mail correspondence which stipulated a **7 minute** response time.

Perusal of SAMFS response times from available SAMFS and other external resources, places greater emphasis on having a reliable delivery of ARFF services as per CASA licensing requirements during Adelaide Airport curfew periods.

MFS attendance although captured within the AEP and MOU/LOA do not negate Airservices responsibility and accountability to provide a compliant ARFF service. This includes having enough resources available to deal with an incident whether that be an aircraft, infrastructure or crash over water. There is no mention within the LOA with the MFS for them to become Airservices crutch to cover ARFF's lack of resources. Adelaide are Cat 5 every night from 2300hrs- 0600hrs as advertised in ERSA and NOTAM. This means the MFS are required to back up ARFF during the curfew period, not only incidents that trigger a response in line with the AEP, but for any emergency response that requires the use of Breathing Apparatus, internal firefighting, rescue or even more man power. Can MFS guarantee a rapid response 365 days/year?

Whilst maintaining a ARFF Category 5 service during the Adelaide airport curfew period having only one ARFF vehicle available to respond to aircraft incidents and "any buildings, any installations, and equipment intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft" (**Ref-CASR, MOS, Part139H, Section 1.2: Definitions**, places Adelaide Airport at a compromised and illegal position of Category 0. This potentially also compromises the airport operator, Adelaide Airport Limited, to operate an airport without aviation fire coverage which is in breach of the "Airports Act, 1996".

Consequently this places an increased and unrealistic reliance on external agencies to mitigate Airservices obligated airport/aerodrome risks as outlined in this submission.

ARFF Provision Failure #4

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

CASR, MOS, Part 139H, Chapter 20- ARFFS Personnel Staffing and Training Requirements- Section- 20.1- Staffing Levels Recommendations- Clauses 20.1.2.2

20.1.2.2 – Aerodromes meeting Level 1 criteria must ensure that the designated staffing levels are met to provide protection for all aircraft movements and property during each operational shift.

Details of Failure

Incorrect staffing levels required to meet “protection for all aircraft movements and property during each operational shift” (*Clause 20.1.2.2*). Adelaide ARFF is mandated for the provision of Category 5 level during curfew periods, however, on occasions has dropped to Category 0 during aerodrome incident responses.

This clearly demonstrates an under resourcing of fire vehicles and personnel. Failing to mitigate known risks due to under-manning and not providing enough resources to deal with emergencies throughout the curfew period to comply with the standards set out in *CASR, MOS, Part 139H, Chapter 20*.

Consequently, Airservices failing to provide a reliable ARFF Category 5 service, with insufficient staff and resources, especially during the Adelaide Airport curfew period.

Summary of Provision Failures

A failure to interpret and understand the ARFF provision and level of service as required by the *Civil Aviation Safety Authority, (CASR), Manual of Standards, (MOS), Part 139H*, detailed within this submission has resulted in breaches of CASA Regulations and the Manual of Standards.

The responsibility of Adelaide ARFF during the Adelaide Airport curfew period as outlined in the MOS is clear and concise. This has been detailed above. The MOS provides clear direction regarding the role of ARFF and its responsibilities for the aerodrome, that being aircraft, infrastructure and a Water Rescue Service for incidents over water. The common theme within the MOS is the allocation of firefighting resources, appropriate for aircraft and property, based on risk/hazard assessments.

Such risk assessments have assumed that over the past 30 years, Adelaide Airport hazards and risks have remained static or diminished during curfew hours of operation. This is reflected in ARFF provision of services remaining at the same entry level of Category 5 for over 30 years.

This submission has identified that while Adelaide ARFF is at Category 5 during curfew hours (2300 to 0600), with one vehicle and 3 firefighters, an incident response on the aerodrome has severely compromised aviation stakeholders at Adelaide Airport which puts Airservices in breach of the MOS.

This has resulted in Adelaide ARFF being unable to meet key ARFF operational service delivery outcomes such as, but not limited to;

- Unable to maintain advertised Category 5 level during general aerodrome incident responses.
- Unable to meet the 2 to 3 minute response criteria to begin fire operations at an aircraft incident while attending other aerodrome incident responses.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

- Increasing reliance on external state agencies, if available with potential limitations to respond to aerodrome.
- MFS are engaged to assist in the event of a Full Emergency at the airport through the AEP and MOA. Airservices funds its business based on charging the aircraft operators through charges **Ref: 'Contract for the provision of aviation facilities and services- 01 April 2017'**. Funding of ARFF's comes from Airservices charging policy and expecting to cost shift responsibility to a State Government MFS seems to be high on Airservices agenda.

Recommendations

In order to overcome such deficiencies and be able to provide the advertised CASA licensed Category 5 service, ARFF at Adelaide require additional resources. To remain compliant with *CASR, MOS-Part 139H* and prevent further breaches Airservices need to conduct a thorough Task Resource Analysis. ARFF are required to maintain a Category 5 service for aircraft movements whilst being able to respond to other emergencies.

In the first instance it would be recommended that Adelaide ARFF curfew category be raised from Category 5 to Category 7, and resourced appropriately as per the ARFF, Aviation Fire Fighting Manuals and Standard Operating Procedures.

This would provide an extra fire vehicle, crewed with 3 extra staff during curfew hours.

As a capital city airport Adelaide requires the addition of a Domestic Response Vehicle (DRV). This not only complies with Regulatory requirements through the curfew period but also manages to maintain Category 9 during the non-curfew period. Responding to any non-aircraft emergency when at Category 9 still requires Adelaide ARFF to drop one Mk8 which breaches *CASR-MOS-Part 139H* as per the reasons above.

Metropolitan Fire Service (MFS) vs ARFF (Adelaide curfew)

- Airservices risk appetite not in line with Risk Management principles.
- MFS emergency response time on to the airport (airside) does not meet response times as per *CASR-MOS-139H*.
- Airservices cost shifting obligations onto MFS.
- Lack of MOU/MOA for additional MFS responsibilities.
- Incompatibility of equipment and procedures.
- MFS do not hold Aviation modules as ARFF as specialist aviation fire fighters.
- All ARFF staff have access to be airside and can enter security restricted areas using Aviation Security Identification Card (ASIC).
- Why has CASA, as the regulator, not identified this deficiency?

Note:

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Airservices seem intent to continue to reduce Adelaide ARFF staff by 40% overnight. Towards the end of 2018, prior to the Christmas shut down period, Airservices were still pushing alternate rosters and engaging staff to 'review' current safety case documents. Even during Senate Estimates hearings whereby the committee were being told that, "there is no intent to reduce Adelaide staff or bring in alternate rosters" Adelaide were being pushed along the road to cut staff and change rosters.

Airservices have sought confirmation from the MFS as to being able to respond to the airport to non-aircraft emergencies such as Automatic Fire Alarms (AFA's). Despite Airservices having a regulated obligation to respond to aviation and aviation related incidents and infrastructure they sought to cost shift this to reduce costs.

There are lots of reasons as to why the MFS cannot be engaged to cut back ARFF services, such as: Incompatibility of procedures and equipment between the MFS and ARFF. In the event of an aircraft incident MFS do not have the required aviation training, equipment and knowledge to deal an aircraft incident. ARFF vehicles and staff are trained and equipped to deal with large fuel capacity fires as well as other fire and rescue procedures. The current MOA with the MFS does not capture the intent of what Airservices has for backfilling ARFF resources. ARFF firefighters and MFS firefighters are similar in names only. The jobs and specialities they undertake are dissimilar in as many aspects as they are alike. Aviation firefighters do not presume to be a Metropolitan Fire Fighter and vice versa.

Example:

Small fire starts in the Control Tower during curfew hours. Tower is manned 24/7 and has 1 controller overnight.

ARFF receive an Automatic Fire Alarm notification and the crew or mobilised. Although on the other side of the airport security fence ARFF have a direct route across runway and exit through the manned security gate (2minutes approx.). ARFF arrive at the Control Tower and open the security gate to gain access (using ASIC) and enter the Control Tower (using ASIC). Fire Indicator Panel (FIP) interrogated and location of fire identified. ARFF have direct line communications with person in Control Tower by either direct line or VHF Radio. ARFF can access any point within the Tower which requires ASIC's. Although on scene ARFF staff cannot make entry to extinguish the fire or save the person inside as we are undermanned. With a crew of 1 Officer and 2 Firefighters Breathing Apparatus (BA) can't be worn as we do not have a back-up BA crew in support. We have to wait for MFS arrival to start internal firefighting and rescue. Current Plan at Category 5 is that MFS will back us up. This is regardless that they do not have compatible equipment, ability to access all areas within the building or the knowledge of the layout. If ARFF were at Category 7 with 2 vehicles, each with 1 officer and 2 firefighters, ARFF would be able to undertake firefighting and rescue until MFS arrival. MFS are minimum 7 minutes away for first vehicle (providing they are not on another job) with additional resources at least 10 minutes away. **The Control Tower is considered critical aviation infrastructure and as such ARFF is mandated to be able to respond and provide a fire and rescue service** as per the Regulations and Airservices documentation.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Category Comparison

- Why does Adelaide man to Category 5 during Curfew?
- What are other service providers providing?
- Is this a cost cutting exercise at the expense of safety?

Edinburgh RAAF base in South Australia also man to Category. Although they are a military base they acknowledge the inherently high risk involved and resource their service accordingly. They have a Fire Control Centre (FCC) just like the whole of ARFF, however, they have it manned independently from the crew that count towards Category. That way the FCC can remain manned to deal with an incident and remain as the main communication point and monitor other assets. Just because there is an emergency happening does not stop the likelihood of another emergency being reported.

During the day Edinburgh are manned to:

- **Cat 6:** 3 Vehicles, 2 Officers and 7 Firefighters (plus FCC operator)

During the night manned to:

- **Cat 4:** 2 Vehicles, 1 Officer and 3 Firefighters (plus FCC operator)

CASR-MOS-Part 139H determines the requirement for the provision of ARFF Vehicles and amounts of Agents to be carried. *Airservices Operations Manual* and *Ops-005* specify the manning requirement in alignment with MOS. Airservices can, and has demonstrated, that these are minimum requirements and can choose to add additional resources. Category 5 may mean 1 Mk8 Vehicle can carry the correct amount of water, foam and dry chemical powder but it does not allow for the manning required to safely meet ARFF obligations. Cat 5 manning of 1 Officer and 2 Firefighters is so far out of step with current procedures, Breathing Apparatus for example, that it is unworkable and compromises the safety of the crew, airport workers and members of the public. There is no physical way a crew of 3 can manage an aircraft incident successfully without having to compromise safety.

Example

- During the Senate Estimates hearing late 2018 Senator Gallacher posed a scenario to CEO Harfield and Acting/EGM Oakley.
- A Royal Flying Doctor flight experiencing an emergency during curfew (Category 5) at Adelaide Airport.
- 6 POB on board, landing on the runway but needed full evacuation due to fire.
- Flight crew of 2, 1 doctor, 2 nurses and a stretcher patient.
- The question was to determine why an aircraft landing through the curfew period should be disadvantaged with regards to ARFF services.

With a crew of 1 Officer and 2 Firefighters it would be impossible to deal with this scenario without compromising the safety of both the responding ARFF crew and the persons on board the aircraft.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

The Officer would:

- be tied up on the radio trying to co-ordinate additional resources
- talking to the pilot on 131.0 – Emergency Frequency- VHF Radio- to cut power to engine/s
- talking to the Tower on 121.7- VHF Radio (possibly talk to Pilot on same frequency)
- delegating tasks to the firefighters
- looking after the safety of staff and passengers within the incident scene
- establishing a casualty clearance area
- maintain fire ground safety
- being the OIC, Safety Officer and Incident Controller until additional resources arrive

The firefighters would:

- Run a hose and foam branch (whether fire involved or not) for fire ground protection
- acquire BA sets and BA Entry Control Officer (ECO) board
- acquire ancillary equipment i.e. Thermal Imaging Camera, portable radio, etc.
- co-ordinate evacuation of passengers
- extinguish external fire and apply foam blanket
- if an internal fire is present or stretcher passenger requires removal they would also have to run for a portable extinguisher or run a second fire hose for internal protection
- start-up BA
- try to extricate casualty on the stretcher from the doorway (entry unachievable due to BA procedures and lack of manning)
- assuming everyone can self-evacuate and walk to safety otherwise casualties need to be assisted

This is just a snap shot of what is required within the first few minutes of arriving at the scene of an aircraft emergency. This is based on a RFDS Pilatus PC 12 which is only **Cat 3** with a fuel load of up to **1,540 litres**. Now apply this to a **Cat 5** aircraft such as Fokker F50 with 58 passengers and crew with a fuel load of up to **5,140 litres**. Just how effective is a crew of 3 going to be?

It was also asked during a Senate Estimates hearing:

Senator Gallacher: “if ARFF had any responsibility with regards to responding to the Terminal?”

CEO Harfield: “Our prime responsibility is for the aircraft movements and the aviation operations. With spare capacity we deal with responding to first aid in the terminal et cetera”.

This response from CEO Harfield was either misleading or a blatant example of someone who does not understand *CASR-MOS 139H*. ARFF has 3 core areas of responsibility of which there is no clear determined priority. These are;

- Aircraft;
- Aviation related infrastructure;
- Water Rescue Service (WRS)/ Difficult Terrain Operations (DTO)

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

In simple terms, an emergency is an emergency. You cannot hold off responding to a first aid call, building response for an Automatic Fire Alarm (AFA), fuel spill, etc. based on aircraft movements.

Automatic Fire Alarms (AFA's)

- Monitoring and responding to AFA's is part of ARFFS's core regulated requirements.
- Airservices charge tenants/building owners a fee to monitor AFA's and have the right to apply a fee for an ARFF response.

Note:

CASR-MOS-Part 139H defines Airservices/ARFF's 3 main responsibilities as being

- o Aircraft emergencies on the aerodrome and within our mandated response area
- o Infrastructure and buildings
- o A Water Rescue Service (WRS)/ Difficult Terrain Operation (DTO)

There is no determination as to which of the 3 takes priority and as such responding to an AFA should be a priority.

Recent Example

Adelaide ARFF delayed an operational response to alarm activation at the Bureau of Meteorology which sits outside of the boundary fence. We also have a written Letter of Agreement (LOA) with this same building to provide services. The delayed response was based on the fact that a Cat 9 flight was about to land. Prior to exiting Gate 2 (vehicle access gate) ARFF were advised of a second Cat 9 flight arrival in a matter of minutes. This delay impacted on ARFF response time and KPI for responding to and AFA activation but was seen as appropriate due to aircraft movements. This is another example of why Adelaide should have a Domestic Response Vehicle (DRV) so that operational responses whether AFA, medical emergency or any other does not compromise an ARFF response time. It seems that AFA's are now being considered as a 'false alarm' when in fact that cannot be determined until investigated. Why delay a response to what may be a fire based on an aircraft landing as 'normal'. Airservices are mandated to respond to structural and aviation incidents and we are now playing roulette to prioritise emergency responses.

Airservices Contract Positions

- Ability of Local Operations Manager (LOM) to undertake his duties without fear of repercussions from senior ARFF Management.
- Performance bonuses for senior management and executive positions are not conducive to running a Government Organisation.
- Bonuses have a history of fostering a culture based on hitting targets at the expense of sound decision making.

Airservices has demonstrated years of cost cutting and compromises based on individuals in the higher echelon trying to make performance bonuses. If Airservices removed bonuses then manipulation of workers at the coal face would decrease overnight. If the focus of senior management was aimed at providing a superior service in exchange for a healthy salary then the service, resources and safety would undoubtedly improve. When you couple reductions, cost saving ideals and unachievable targets to a dollar incentive there is only one outcome and that is at the detriment to what we are all striving for.

Local Operation Managers are constantly being forced to tow the company line at the fear of speaking up and losing their job. A solution to this problem would be to bring the LOM under the same Enterprise Agreement as the staff on the station. As a contract position their there is too much to lose by speaking up for what is screamingly obvious. The LOM position has now become little more than the puppet on a string.

Relationship between Airservices and CASA (and AMSA)

- Airservices seems to think the best and easiest way around a problem is to seek dispensation from the regulator.
- CASA as the Regulator should be there to hold Airservices accountable to meet the Regulations.
- Dispensations should be sought as a last resort and should be cleared as a priority.
- Dispensations which show expiry dates (some back to 2015) are still active and have not been revised.
- CASA ARFF Specialist-Subject Matter Expert (SME) has always been appointed from ex ARFF management employees.

Note:

Airservices currently has no fewer than 10 (ten) outstanding dispensations (exemptions) from CASA. Of those 10 (ten) 9 have exceeded their expiry date but are still being used by Airservices as evidence of dispensation.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Ref:

- **CASA EX30/18- repealed date 30th April 2019- (the only one Current)**
- **CASA EX42/14 duration through to May 2015**
- **CASA EX92/14 duration through to July 2016**
- **CASA EX106/14- expired August 2016**
- **CASA EX121/14- expired December 2015**
- **CASA EX05/15- expired June 2018**
- **CASA EX10/15- expired December 2015**
- **CASA EX77/15- expired August 2017**
- **CASA EX137/15- expired June 2018**

If an exemption has an expiry date then it should be revised, cancelled or amended. If Airservices has not met the requirement to close the exemption then the Regulator (CASA) should be asking Airservices to show just cause as to why they did not have the problem resolved. CASA conduct regular audits of ARFF stations and ARFF would be issued a Non Compliance Notice for an issue like this yet the relationship between Airservices and CASA seems to be void of self-assurance checks.

CASA engage the services of ex ARFF management employees when seeking to fill the role of Subject Matter Expert (SME). This brings subjectivity into the relationship between the regulator and the service provider. Both are Government agencies. Who checks the checker? CASA SME having previously been an Airservices (ARFF) senior management employee has undergone the same training and work history as those he is auditing. Does this conflict with the role of the Regulator? This SME has predetermined beliefs and a history based on doing what Airservices has taught him/her during their career. How can someone who has been trained to think a specific way within an organisation identify any deficiencies, creep or compliance issues within that same organisation?

Airservices has demonstrated a reliance on seeking dispensation from the regulator. This is not limited to CASA. Australian Maritime Safety Authority (AMSA) was approached by Airservices in relation to provision of Water Rescue Services (WRS) around Australia. Airservices provides a WRS capability at 10 (ten) locations and although a Commercial Vessel which requires a Coxswain Licence AMSA granted an exemption to allow Airservices to hold a Limited Coxswains Licence. This was due to the lack of time on water for staff to complete the mandatory hours to maintain a Coxswain Licence. The initial Limited Coxswain Licence had a life of 5 years and as the renewal period got closer Airservices sought dispensation again. This time AMSA approved that Airservices only needed to have staff to hold a recreational boat licence.

AMSA dispensations

AMSA EX02- exempt from requirement for an Operating Certificate

AMSA EX03- Category NS

AMSA EX24- Emergency Service Exemption

The South Australian Metropolitan Fire Service have a rescue vessel and are required to hold a full masters certificate and are on water at least 2 times per week to maintain the required amount of hours on water. Adelaide ARFF are on water once every 8 weeks which is little more than a token effort to maintain skills.

Airservices Restructure

- During 2018 Airservices continued its onslaught to 'restructure' the organisation.
- Staff throughout non-operational sections of Airservices had to re-apply for their positions.
- Although impacting many sections that interact with ARFF it was the Emergency Vehicle Technicians (EVT's) located at larger airports that were most noticeably culled.
- Adelaide lost 1 of its most diligent EVT's due to downsizing.
- The restructure now sees the EVT's at Adelaide maintain the vehicles at remote localities.
- Faults with vehicles are now building up as there are no EVT's on site to fix issues.

Note:

Adelaide once had an EVT compliment of 1 Manager (operating out of the facility), 2 full time EVT's and 1 apprentice. In recent times this has seen the apprentice leave and not be backfilled. One of the previous EVT's was given an involuntary redundancy because he was only classed as Level 3. He was then backfilled by a level 4 EVT from Melbourne as they too had to reduce numbers during the restructure.

The EVT's are now in a position whereby they are travelling for weeks on end to undertake the scheduled maintenance of vehicles at remote locations. Adelaide can go for weeks with no EVT coverage and fault reports on vehicles are mounting as nobody is there to undertake the required work to fix them. Although this has not impacted on Adelaide ARFF's ability to maintain category it will only be a matter of time before category is impacted.

At another undisclosed location ARFF staff have been put into a position whereby they had to problem solve and fix an Mk8 fire vehicle that would not start. This problem was reoccurring and is not the responsibility of ARFF staff to fix and compromises safety as well as compliance.

Senate Inquiry Submission- Adelaide Aviation Rescue Fire Fighting

Conclusion

Anyone around long enough, such as career firefighters, some for 20 to 30 years or more service have seen the wheel go around several times. Airservices employs a new CEO, AGM, HR Manager who think “staff numbers are too high, let’s have a restructure, culling process, voluntary redundancies, run the service down to save money” to then find out in a few years’ time, when a new contract manager is engaged, that the manning is too low, staff numbers need to be bolstered, vehicles are getting old, the staff are aging and there has been no future proofing of the business model.

The Staff at Adelaide ARFF have highlighted within this submission some glaring instances where Airservices are non-compliant with regards to Regulations, Procedures and Australian Standards. We have also highlighted a need for a review between the relationship of Airservices and the regulator CASA. Dispensation from a regulatory requirement should be temporary and not be seen as a “get out of jail free” card. Once issued it should be a priority to have it cleared to then comply with the regulation.

From the outset Adelaide ARFF have been upfront and honest to try to achieve a collaborative approach to rectify the shortcomings with the current strategic direction Airservices is taking. Whilst ARFF staff were fighting for a 2%/year pay rise during Enterprise Agreement negotiations ARFF and Airservices senior management were slapping each other on the back and rewarding themselves with considerable bonuses. This was in direct contrast to their undelivered achievable outcomes, excessive expenditure and budget blowouts.

On a final note ARFF Adelaide are serious about providing a safe and compliant service which not only maintains the safety of people we are here to protect but also of ARFF staff. Adelaide ARFF need to increase the provision of service to include a **Domestic Response Vehicle (DRV)** in line with other Australian capital city Airports. This DRV can then be utilised to provide **Category 7** coverage during curfew and **maintain** Category 9 during non-curfew which enables ARFF to comply with *CASR-MOS-139H*.

The interested staff at Adelaide ARFF thank you for your consideration of our submission.

Glen Barker

4th March 2019.