

## RRAT Opening statement.

### Inquiry into the provision of rescue, firefighting and emergency response at Australian airports

Thankyou senators for this opportunity to speak of concerns regarding Australian aviation safety.

Brief background; I am a career fire fighter with 28 year as an aviation firefighter, 18 with Airservices, 13 as an officer, over 800 jobs as an Officer In Charge. I have worked at Townsville Darwin and Brisbane Airports, each have their unique attributes as well as their similarities.

My professional opinion and that of my fellow fire fighters is not aimed at any persons within Airservices, but at the flawed approach to service provision. I am here for only two reasons, concerns for the safety of the flying public and that of my fellow fire fighters.

Airservices safety systems are based on a business and industrial models that are not suited to the provisions of an emergency service. They allow for a risk to be reduced based on likelihood, which allows them to manipulate the outcomes. While this works in most industries it is not relevant to an emergency service provider.

ARFFS provision should be based on the assumption that it is there for the event, not the likelihood. It assumes the worst plausible case scenario. The baseline for this event is and must always be **CATASTROPHIC.**

#### ***There are only three primary areas that can reduce this impact.***

**TIME;** the critical time it takes to get to the event and bring it under control.

**RESOURCES;** enough agent, vehicle's and specialised equipment to manage it.

**STAFFING;** enough staff to execute all task in a critical time frame.

If any of these factors are not sufficiently accounted for the end result returns to catastrophic, mass loss of life. What determines a successful outcome? The aircraft itself is irrelevant, once its has been significantly damaged by fire it will be lost, Maximum saviour of life is the only measure in this situation.

#### **TIME**

Our objective is two minutes, we must chase this with vigour, the earlier the intervention the more likely the fire can be controlled in the developing stages. Every second longer increases the fires chance of taking hold and reduces likely hood that the ARFFS can control it.

Aiming for three minutes is a flawed concept. Minimum standards drastically increase the risk of loss of life.

The arrival of the first vehicle must be able to apply 50% of the discharge rate. AS applies this but it does not fulfil its full obligation under ICAO. All vehicles must be able to arrive in less than 4 minutes as per; **ICAO SARPS STANDARD**

**9.2.31 Any vehicles, other than the first responding vehicle(s), required to deliver the amounts of extinguishing agents specified in Table 9-2 shall ensure continuous agent application and shall arrive no more than four minutes from the initial call.**

ARFF in Brisbane cannot meet this obligation with the new runway under its current plan and station location and without additional vehicles.

These vehicles can exhaust their agent supply in as short as 1.30 seconds at 6200lpm using monitors.

Support specific to Brisbane 17 minutes away (local station 7 minutes) but they have no access, they do not have keys and cannot enter or operate on the aerodrome without escort (AEP) and airport security regulations. It must be noted there are no hydrants on the taxiways or runways and metropolitan fire services do not have the water capacity to fill a single vehicle.

A truck takes 15 minutes to refill from departing scene to returning. This leaves a critical gap anywhere from the 6-minute point until the 17-minute point. **An 11 minute pinch point or dead spot.**

We will come back to the pinch point when I address staffing.

Explicit to Brisbane with its new runway this means both stations have to be resourced separately and located specifically to each of the runway needs. This is not occurring. This will need to be adopted with Melbourne's and Perth's future parallel runways also.

This new station is about to be built in Brisbane in the wrong location and these critical times will be compromised. Truck from Station East will not reach the new runway in less than four minutes and continuous application of agent will not be met.

## **RESOURCES:**

This is not just agent and vehicles, but also includes access, rescue equipment and specialist safety equipment for firefighters.

Airservices meets the minimum agent requirement, a minimum standard is never a good starting point they should be reaching for the NFPA standard. What is the difference between the two?

The minimum standard includes Q1 and Q2.

Q1 is the agent required for initial knockdown of the fire (the Bulk).

Q2 is the agent required to maintain a safe external environment and possible extinguishment.

The NFPA includes an additional factor Q3.

Q3, the amount of agent required for safe internal rescue and firefighting operations. Although Airservices acknowledge Q3 in many documents they do not apply unlike most other ARFFS services that they compare themselves too.

Our current fire fighting foam product is of a questionable quality and that alone justifies the additional agent.

**Access;** Airservices is spruiking it has this covered. The don't. The Phase one workshops identified that we had serious deficiencies in access to aircraft and doors cannot be opened from ladders. To date we only have one set of air stairs (access vehicle not yet online) they have three on platform trucks the (Morita) which are not fit for purpose. All stations require air-stairs to gain access to any cat 6 or higher aircraft due to the height, not only do they allow for firefighting and rescue operations, they can also be used to evacuate passengers. The Metropolitan Fire Service will have ladder and platform trucks if at all, once again these are not fit for purpose.

In Brisbane with the station 2 kilometres apart both stations must be resourced independently due to the separation. This will require more vehicles, vehicles that AS doesn't have.

## **STAFFING**

This is the most contentious issue, but it is the most important to a successful outcome. I've heard it already asked why do we need more than a driver and an operator? The vehicles, the monitors are awesome, high output but this comes at a serious cost. Once the bulk of the fire is controlled (Q1) and our targets become smaller and harder to get at. Even in the primary fire stage large amounts of agent get wasted. Every second on a trigger slightly off target is 80l of agent lost and 40l for the bumper monitor and it doesn't take long to add up. On top of this you cannot use these monitors around evacuating passengers and deployed aircraft slides safely. Vehicle can only really be mobile throughout Q1 or people get run over.

Staffing numbers on the ground equate hose line attacks that are precise and agent efficient at 8l per second (90%) less wastage equals extended operating time closing the previously mentioned pinch point or dead spot of 11 minutes. This also allows rescue to commence as soon as evacuation slows.

In regards to category 10 emergencies, the phase 1 workshops clearly identified to all participants that we would struggle on this scale. This was the first time the service ran practical exercises at this scale and all were done with 17-20 + staff. At this level short cuts were still being taken, issues regarding entry control (knowing who was where) and hot cylinder changes (resending BA teams without recovery time).

Airservices has never conducted this exercise with 14 staff or 11, they have been asked on many occasions. The reason they won't do it, is because it can't be done. It is inherently unsafe and they know it.

The embedding of crew is reckless, Airservices know that Brisbane and Perth will respond to approximately 800 responses a year. This will increase with the growth of the Airport. This is 800 reasons not embed. It is predictable and likely; the pure number of non-aviation responses demand it be managed separately as it always has in the previous decades. It was to risky then and it is too risky now.

**At present Airservices dictates the staffing numbers not the regulator, CASA. This component is fully self-regulated and I use this term loosely.**

The TRA and the NFPA recommendations are the only acceptable benchmarks to establish staffing numbers. With Airservices track record I do not believe the TRA on its own is sufficient as they are well versed at manipulating safety work to lower standards. **Staffing numbers must be regulated or legislated to prevent the watering down of safe numbers.** The NFPA must be the baseline, and the

TRA establishes if additional staff above this are required. This will also protect the smaller stations with currently 5 or 6 staff to manage 160 -180 passengers and limited or no support from other emergency services such as remote locations like Yulara, Newman, Karratha. Giving them a baseline of 9 staff instead.

In conclusion the legislation and regulation's must be brought into with ICAO and meet all standards and recommended practices as well as implement the NFPA standard for staffing and agent. This would include adopting the TRA to adopt all staffing needs above the NFPA baseline.

Thankyou Senators

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