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Committee Secretary
Senate Rural and Regional Affairs and Transport References Committee
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Australia

Dear Dr Thomson

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

Thank you for your correspondence of 11 December 2018 inviting Airservices Australia (Airservices) to provide a submission to the inquiry into the provision of rescue, fire fighting and emergency services at Australian airports.

Please find attached Airservices' submission.

Yours sincerely

Michelle Bennetts
Acting Chief Executive Officer
5 March 2019



**Airservices Australia submission to the
Senate Rural and Regional Affairs and Transport
References Committee Inquiry
into the provision of rescue, firefighting and
emergency services at Australian airports**

March 2019

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Airservices Australia overview

Airservices is a Commonwealth corporate entity established under the *Air Services Act 1995* and responsible for providing safe, secure, efficient and environmentally responsible services to the aviation industry. We are governed by a Board which reports to the Federal Minister for Infrastructure, Transport and Regional Development.

Airservices provides the aviation industry with air traffic control, aeronautical information, aeronautical telecommunications and aviation rescue fire fighting services.

Aviation Rescue Fire Fighting Services (ARFFS)

- ARFFS provided at 26 Australian airports.
- Primary role is to protect people and property in the event of an aircraft accident or any other fire on the aerodrome.
- ARFFS responded to almost 6800 emergencies and saved 17 lives in 2017-18.

Airservices provides ARFFS at 26 of Australia's busiest regular passenger transport airports, with 12 new services established within the last 15 years. The 27th ARFFS is currently being established at Whitsunday Coast Airport and will commence operations in 2020.

The primary role of ARFFS is to protect people and property in the event of an aircraft accident or any other fire on the aerodrome. In 2017-18, we responded to almost 6800 emergencies and saved 17 lives. ARFFS must be able to respond to an aircraft incident at either end of a runway and be able to apply fire fighting agent on to a fire at 50 per cent of a pre-determined discharge rate within three minutes from the initial call.

Airservices owns, operates and maintains a fleet of over 120 specialised, high-performance ARFFS vehicles, aerial rescue vehicles, water rescue boats, difficult terrain vehicles and domestic response vehicles. This allows us to respond to a broad range of aviation and airport emergencies, including aircraft incidents, water rescue responses, fire alarm activations and structural fires, medical assistance requests and hazardous material incidents. To support community safety we also respond to requests for assistance from other fire services when we are able to do so.

Airservices ARFFS is one of the world's largest with more than 950 professional and dedicated operational and support personnel based around Australia. Each of Airservices highly trained and experienced fire fighting and technical employees are experts in their field with unique skills, knowledge and experience.

The level of service provided at each airport ranges from International Civil Aviation Organization (ICAO) Category 5 during the curfew period at Adelaide, Category 6 at regional airports catering for aircraft such as Airbus A320, and goes up to Category 10 to cater for Airbus A380 at airports such as Melbourne and Sydney. The scheduling and frequency of airline operations determines the hours of operation of each ARFFS location. Airservices fire stations at the busiest airports provide a 24-hour service. Hours of operation at smaller airports are determined by commercial passenger aircraft flight schedules.

ARFFS Regulatory Environment

- Civil Aviation Safety Regulations provide the regulatory framework for ARFFS in Australia.
- The regulations have recently been reviewed to ensure they remain appropriate and reflect the contemporary environment.

The current regulatory framework for ARFFS in Australia is contained in the Civil Aviation Safety Regulations (CASRs) Subpart 139H and the associated Manual of Standards (MOS) which commenced in 2003.

The CASRs and the associated MOS operate so that ARFFS must be provided at aerodromes:

- from or to which an international passenger air service operates; and
- any other aerodrome where the number of passenger movements has reached 350,000 in the previous financial year.

The standards prescribed in CASRs reflect Australia's commitment to ICAO Standards and Recommended Practices (SARPS) applicable to ARFFS. ICAO SARPS describe the core elements of ARFFS including the level of protection to be provided, extinguishing agents, response times and personnel. Airservices contributes to the development of these international Standards.

The following table sets out the minimum requirements for each service category. The minimum number of fire vehicles and quantity of extinguishing agent (water and dry chemical powder) to be carried are contained in the CASRs. The minimum number of staff per shift is developed by Airservices and approved by the Civil Aviation Safety Authority (CASA) for each category level.

MINIMUM REQUIREMENTS					
Category	Typical Aircraft type	Staff per shift	Water	Fire Vehicles	Dry chemical powder
10	A 380	14	32,300L	3	450kg
9	B 747	10	24,300L	3	450kg
8	A 330-2	8	18,200L	3	450kg
7	B 737-8	6	12,100L	2	225kg
6	A 320	5	7,900L	2	225kg
5	ATR 72	3	5,400 L	1	180kg

The Department of Infrastructure, Regional Development and Cities (DIRDC) has recently led a regulatory policy review into ARFFS to ensure the regulations reflect the contemporary operating environment and remain appropriate for the future. The outcomes from this review are being implemented via proposed changes to CASR Part 139H and the associated MOS.

ARFFS service performance

- ARFFS provides staff, vehicles and extinguishing agent at or above the regulated category at every fire station.
- ARFFS maintains category at or above 99.9% of the time.

A table setting out each ARFFS location, the relevant category level (based on the size and frequency of the largest operating into the aerodrome) and the required staff, fire vehicles and extinguishing agent (water and dry chemical powder) is at Attachment A.

Airservices resources ARFFS at or above the regulated category requirement at every fire station. By effectively utilising capacity established to meet regulated ARFFS requirements, Airservices has been able to maintain the required category level to ensure an immediate response to an aircraft emergency while also providing non-regulated services such as first aid response and mutual aid to other fire services.

Airservices has developed its own performance target that aims to ensure the vehicles, fire fighting agent and fire fighters for the required category level are readily available to meet the regulated response times 99.9% of the time the service is available. This means additional resources are provided at some locations over and above the regulatory standard so that ARFFS can respond to other regulated (e.g. fire alarm activations) and non-regulated (e.g. requests for first aid assistance) emergencies while still maintaining category at or above 99.9%.

This performance target is applied equally across all locations and assists Airservices to better understand key impacts on maintaining service delivery and where additional resources (over and above the regulatory standard) may be provided. Airservices has consistently maintained its service performance in line with this performance target, achieving 99.93% in 2017 and 99.94% in 2018.

Funding ARFFS operations

- ARFFS funded by charges to aircraft operators, based on the weight of the aircraft and the category of service provided.
- Charges are based on regulated service provision, and do not cover first aid provision and other non-regulated services.

Airservices operates as a corporate Commonwealth entity and is financially separate from the Commonwealth. Revenues are received on a fee-for-service basis and Airservices does not receive any appropriations from the Government.

All airlines (international, domestic and regional), charter operators, flight training schools and general aviation operators are charged for the services they receive. The level of charges is regulated by the Australian Competition and Consumer Commission.

The charges for ARFFS are levied on landings and are charged based on the Maximum Take-Off Weight (MTOW) of the aircraft, which is generally in line with international practice. Prices vary by airport, based on the category of aircraft flown.

General aviation aircraft are not charged for ARFFS (for example, the King Air B200 twin engine aircraft used by the Royal Flying Doctor Service and smaller aircraft).

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Aircraft up to Category 6 pay a single network charge that applies at all locations where and when an ARFFS is being provided. Aircraft that are Category 7 (for example, Boeing 737-800 series aircraft) and larger pay a location specific category based charge recognising the incremental increase in costs associated with each higher category of service.

The cost of providing an ARFFS is driven by the category of service and the airport hours of operation. The higher the category of service, the more fire fighters, vehicles and infrastructure required to service the aircraft operating at the aerodrome.

On average, it costs approximately \$4.5 million per annum to provide a base level of service at a Category 6 aerodrome.

In contrast, it costs an average of \$19 million per annum to provide a Category 10 ARFFS, including the additional domestic response fire vehicle and staffing that Airservices provides at very large international locations to assist in maintaining service category when responding to non-aircraft incidents, such as first aid call-outs and fire alarms, at and around the airport.

The application of a network charge as a 'base level' service charge across all locations means that in some regional locations the ARFFS charges recover less than 10% of the costs at the location. These are cross-subsidised by the capital city airports with high levels of traffic and larger aircraft.

International comparison

- Internationally, ARFFS standards are established by ICAO, while funding models vary.

Internationally, ARFFS category levels and service provision are governed by ICAO SARPS. Each provider must then consider its local operating context and regulatory framework to ensure that its service provision meets the required standard.

ARFFS funding models vary internationally, and are often dependent on the relevant national regulatory context.

ARFFS in many countries including the United Kingdom and New Zealand operate on a commercial basis while still adopting international standards and best practice. In the UK, it is typically the responsibility of the individual airport operating company to put in place a rescue and fire fighting service which needs to meet relevant regulations.

Challenges

- Airservices provides non-regulated services (such as first aid) within existing capacity which it does not charge for.
- Airservices responds to airport fire alarms, which is increasingly at commercial premises.
- The provision of the services should not impede Airservices response to aircraft emergencies, and must be balanced to avoid imposing additional costs on airline charges.

Airservices ARFFS has traditionally provided, in combination with its regulatory functions, non-regulated services at airports utilising existing capacity. These services include emergency response

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first aid (for example, to a person requesting assistance in the airport terminal) and responding to requests for assistance from other fire services to support community safety.

In 2017-18, ARFFS responded to over 4,000 emergencies not related to regulated service delivery with the vast majority of these being requests for first aid assistance.

While responses to these non-regulated services utilise existing resource capacity and provide useful training and development opportunities for staff, these activities should not compromise Airservices' ability to provide the required ARFFS category of service to respond at any time to aircraft emergencies. They must be carefully managed to ensure they do not grow to an extent that they require significant resources beyond what can be provided within existing capacity therefore lead to an increase in landing charges at aerodromes

ARFFS also regularly respond to fire alarm activations at an airport, which is part of our regulated service. Today many of these fire alarm responses are to commercial or non-aviation related developments such as business parks. As these non-aviation related commercial developments on airport land continue to increase, the expectation and appropriateness of ARFFS continuing to service these facilities requires careful consideration given the safety and cost implications. The local state/territory fire services may in some cases be more appropriate to respond to these type of emergencies. This approach would allow ARFFS to remain focused and ready to respond to aircraft emergencies and aviation related infrastructure on the aerodrome.

Having regulations that are outcomes based (where possible) enables flexibility in approach which is essential. These issues have been identified as part of DIRDC's regulatory review into the provision of ARFFS.

Responses to the Inquiry Terms of Reference

a) The current standards applicable to the provision of aerodrome rescue and firefighting services relating to community safety and the emergency personnel safety

- Australia's aviation safety regulatory system is based upon ICAO standards.
- Airservices safety management system (SMS) provides the framework to ensure compliance with relevant legislation, regulations and standards.
- Active monitoring of safety performance is a core requirement of the SMS.

Australia's aviation safety regulatory system is based upon the international standards, recommended practices and procedures adopted by ICAO.

CASR Part 139H and the associated MOS reflect these ICAO standards and prescribe the mandatory requirements for ARFFS. Other relevant legislation ARFFS complies with include the *Work Health and Safety (WHS) Act 2011* (Cth) and supporting WHS regulations and the *Marine Safety (Domestic Commercial Vessel) National Law Act 2012*.

CASR 139H requires Airservices to document in an Operations Manual how it complies with the mandatory safety standards described in the CASRs and MOS. This Manual is approved by CASA and comprehensively describes the key elements of ARFFS service delivery model. It includes the level of service (Category) provided, number of operating personnel, the performance of fire fighting vehicles (including response times), equipment and fire fighting agent, training and qualifications frameworks and programs, required buildings and facilities, protective clothing and equipment, operational doctrine including standard operating procedures and contingency plans, the requirements to maintain service including the process to advise industry should the level of service

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be temporarily reduced (such as when ARFFS is responding to an emergency), the interface arrangements with other fire fighting services, safety management systems (SMS) and quality control systems.

Airservices first established its SMS in the late 1990s, well before it became a regulatory requirement. Our SMS today is sophisticated by international standards, and provides a framework to help maintain a balanced and structured approach to managing safety, including ensuring compliance with legislation, regulations and standards. Airservices' SMS is designed in accordance with CASRs, the *Work Health and Safety Act 2011* and the Civil Air Navigation Services Organisation (CANSO) Standard of Excellence in SMS.

It is made up of 16 elements, each with its own objective and requirement. Airservices' SMS ensures the promotion of active information sharing to continually improve the ability to identify and control risk, provide assurance that processes and risk controls are operating to maximise safety performance; and are in compliance with explicit safety standards. Active monitoring of safety performance is a core requirement and this may drive the review of internal safety standards and the submissions to other parties whose standards Airservices must comply with.

Risks are managed in accordance with Airservices Risk Management Standard which aligns to AS ISO 31000:2018 Risk Management – Guidelines. Risk management is an integral part of all Airservices activities. The purpose of ARFFS risk management is to actively identify, assess, control and manage hazards to ensure the resultant risk is managed to a level that is as low as reasonably practicable (ALARP).

b) The standards for the provision of emergency response at Australian airports, including emergency medical response and response to structure fires and other incidents;

- The regulations do not define a specific requirement for ARFFS to provide emergency first aid.
- The vast majority of first aid responses provided by ARFFS are non-regulated responses such as a person requesting assistance in the terminal.

The CASRs do not define a specific requirement for ARFFS to provide emergency first aid. The CASR Part 139H Manual of Standards does require the provision of certain life support equipment and for fire fighters to be skilled and trained in administering first aid so assistance can be rendered during an aircraft or other regulated emergency (e.g. fire on the aerodrome). However, the vast majority of first aid responses provided by ARFFS are non-regulated responses such as a person requesting assistance in the terminal.

Airservices considers the current regulatory approach to first aid appropriate as it supports the provision of first aid in non-regulated situations, but allows this to be balanced against ARFFS regulatory obligations (responding to aircraft emergencies and aerodrome fires).

Responding to structural fires on the aerodrome is a regulated function and as such, the regulatory requirements and competencies are robust. ARFFS qualifications include units of competency related to structural fire fighting and ARFFS training programs include structural fire fighting scenarios.

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c) The comparison of safe systems of emergency response standards and systems of work for firefighting and rescue operations for structure fires, aircraft rescue, emergency medical response and other emergency incidents;

- Airservices compares safety standards and practices employed by other ARFFS providers and domestic fire services

Regular comparison of the safety standards and practices employed by other International ARFFS providers and domestic fire services is an integral component of Airservices operating model.

Airservices ARFFS is represented on peak international and domestic industry bodies and has built strong relationships with other leading ARFFS providers and Australian domestic fire and emergency agencies. We frequently engage with a broad range of stakeholders, including peers in Europe, North America and New Zealand, to ensure Airservices maintains an awareness of industry changes, the latest research and the impacts and benefits of emerging technologies.

These networks and relationships are critical and enable ARFFS to benchmark its service and share information on all aspects of ARFFS safety standards and methods of service delivery, including reviews and lessons learnt from major aircraft emergencies globally. In the last 12 months, ARFFS has shared its training program with other ARFFS, benchmarked operating capability with a number of ARFFS providers in Europe (including on-site visits), seconded staff to an overseas ARFFS training college to deliver key aspects of their training curriculum and exchanged information on a variety of topics.

Domestically, through the Australian peak industry body, the Australasian Fire and Emergency Service Authorities Council (AFAC), ARFFS is represented on the vast majority of technical groups through the AFAC collaboration framework. This framework facilitates national collaboration, enabling members to jointly consider common challenges, generate solutions, develop doctrine and inspire new directions in practice. ARFFS has drawn on this collaboration framework to assist in the review of key safety procedures including Compressed Air Breathing Apparatus(CABA) operations, heat stress management, lessons management framework, rescue equipment and operational doctrine and public safety training framework.

d) The consideration of best practice, including relevant international standards;

- Airservices benchmarks its operations against overseas providers.
- Airservices maintains a broad network of domestic and international ARFFS professionals to share information and best practice.

It is difficult to draw comparisons with other providers of ARFFS as the operating environment, regulatory framework and ownership structures vary across jurisdictions.

In comparison with other International regulatory standards, specifically those of the United States (US), Canada, the United Kingdom (UK), the European Aviation Safety Agency (EASA) and New Zealand, the Australian regulatory framework (CASR 139H) is more extensive and requires ARFFS to comply with a broader range of safety standards, including the specifications described in the 29 Chapters contained in the supporting Manual of Standards.

In addition to the legislative frameworks applied overseas, the US based National Fire Protection Association (NFPA) has also developed codes and standards applicable to ARFFS.

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As mentioned earlier, Airservices uses its international and domestic networks and conducts research through a specialist team of operational fire fighters to consider, understand and peer review other regulatory and industry standards against its operating model and capability. Airservices approach to international standards is to analyse their applicability to the broader environment here in Australia, consider their relationship to the regulations, consider their validity and where merit can be demonstrated, adopt or adapt elements of them.

For example, elements of ARFFS vehicle design and performance and training frameworks have been drawn from NFPA standards.

e) The mechanisms and criteria for the review of the provisions of safety standards for the provision of rescue and firefighting services, if any;

- Airservices SMS provides the framework to assist in implementation of the regulations and promote a strong safety culture.
- Airservices actively monitors its performance against the regulatory safety standards.

Airservices SMS provides the necessary framework to assist in the implementation of the regulations and also promote a strong safety culture and ensuring safe practices of work.

Airservices SMS ensures the promotion of active information-sharing to continually improve the organisation's ability to identify and control risk, provide assurance that processes and risk controls are operating to maximise safety performance; and are in compliance with explicit safety standards. Active monitoring of safety performance is a core requirement and this may drive the review of internal safety standards and the submissions to other parties whose standards we must comply with.

Airservices actively monitors its performance against the regulatory safety standards and regularly engages with CASA in relation to the effectiveness of the regulations.

Airservices may set its own standards that are over and above CASR requirements if it necessary for our service provision or the safety of our people.

DIRDC recently conducted a regulatory policy review of the regulations in consultation with CASA and Airservices and has proposed a number of changes to enhance the regulations so they better reflect today's operating environment.

f) A review of Airservices Australia policy and administration of aviation rescue and firefighting services;

ARFFS commenced in Australia in the 1940s and was provided by the Commonwealth Government (Department of Civil Aviation through to the Civil Aviation Authority) until 1995 when Airservices was established.

The *Air Services Act 1995* empowers Airservices to provide a rescue and fire fighting service with the specific functions and other associated elements of the service described in the Airservices regulations.

Airservices has established a business group to administer the ARFFS function within the organisation. The business group is led by an Executive General Manager who is responsible for the strategic direction and operation of the group and reports to the Airservices CEO. There are six direct reports to the Executive General Manager, including a Chief Fire Officer, with responsibilities ranging from operations, safety, people (HR), environment, finance and asset management.

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Airservices continues to invest in ARFFS technology and infrastructure. In recent years we have completed an upgrade of the Brisbane fire station, commenced an upgrade of the Canberra fire station and have committed to upgrading the Rockhampton and Coolangatta fire stations. We are constructing a second fire station at Brisbane and a new station at Whitsunday Coast Airport. We are also investing significantly in sustainment activities for our existing emergency vehicle fleet in the coming years and have commenced planning for fleet replacement.

ARFFS fire stations fall within the definition of a 'public work' and therefore any proposal to establish a new ARFFS requires approval from the Parliamentary Standing Committee on Public Works.

ARFFS strategic initiatives are identified in the Airservices Corporate Plan and progress is reported to the Board, to the Minister and described in Airservices Annual Report.

g) The effectiveness and independence of the regulator, the Civil Aviation Safety Authority (CASA), to uphold aviation rescue and firefighting safety standards;

The Civil Aviation Safety Authority (CASA) monitors the ongoing safety, health and maturity of authorisation holders, including Airservices ARFFS. CASA surveillance includes audits and operational checks involving the examination and testing of systems, sampling of products, and gathering evidence, data, information and intelligence. Surveillance assesses an authorisation holder's ability to manage its safety risks and willingness to comply with applicable legislative obligations. Since 1 January 2016, CASA has conducted 102 surveillance events of ARFFS facilities and operations.

CASA's surveillance program also provides Airservices with the ability to self-report any identified areas of non-compliance and the corrective actions to rectify the deficiency.

h) The impact on Australia's national and international reputation and aviation safety record as a result of any lowering of aviation rescue and firefighting services; and

- Airservices is proud of its strong safety record and has no intention to reduce services
- Airservices strives for continuous improvement.

Airservices is proud of its strong safety record and has no intention to reduce the quality and highly valued services it provides to the aviation industry.

Airservices continually strives to examine all aspects of its operation to identify where improvements to safety processes and practices can be introduced to ensure Australia remains at the forefront of aviation safety.

Currently, Airservices operating capability exceeds regulatory standards in many areas by providing:

- Staffing over and above the CASA approved staffing level at some locations (Sydney, Adelaide and Melbourne)
- Fire fighting agent (water and extinguishing medium) - up to 100% more than the regulatory standard (location specific)
- Domestic type vehicles at busier locations (Perth, Brisbane, Sydney and Melbourne)
- Aviation Special Vehicles (ladder or 'escape stair' – mid 2019) at busier locations (Perth, Sydney and Melbourne) with Brisbane scheduled by mid-2019
- Fire fighting ('front line' foam producing) vehicles in excess of the number required to deliver the service (the operational requirement is for approximately 75 vehicles compared to an overall fleet number of 90 vehicles)
- ARFFS coverage beyond the regulated hours of operation (Sydney and Adelaide).

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Additionally, Airservices is progressing many initiatives to further improve fire fighter safety and the safety and effectiveness of ARFFS operational response, including the following industry leading initiatives where the outcomes will be shared with the domestic and International (ARFFS) community:

- Fire fighter heat stress management
- Compressed Air Breathing Apparatus
- Portable rescue equipment
- Research study - ARFFS response times, fire fighting agent requirements and aircraft passenger survivability rates
- Virtual reality and simulation
- Staff level (Task Resource Analysis -TRA) framework.

In 2019, utilising the newly developed TRA framework, Airservices will be undertaking a national review to ensure service delivery remains commensurate with the operating environment at each aerodrome.

i) Any other related matters

In addition to meeting its regulatory obligations, ARFFS is working with a number of airports where the CASRs do not require an ARFFS to be provided. ARFFS has established relationships with these airports and has allocated fire fighting subject matter experts to assist with airport emergency planning and preparation.

Conclusion

Airservices provides a critical fire fighting capability and emergency response service to the aviation industry and travelling public at airports around the country. Airservices takes its role as an emergency service provider very seriously and staff are passionate about providing this valuable service to industry and the community.

Airservices has performed consistently well under the existing regulations and in some cases provide additional services within existing resources that exceed the regulatory requirement. However, these services need to be balanced with, and not impede, ARFFS ability to be able to deliver the regulated service that customers pay for and the community expect.

Many of the regulatory challenges facing ARFFS have been identified in a comprehensive regulatory policy review undertaken by DIRDC in which Airservices was a contributor. Airservices continues to work with industry and relevant government agencies to ensure Australia's excellent safety record is maintained.

Appendix A: ARFFS locations and resourcing

Location	Category	CASA approved staffing (officers & fire fighters)	Actual staffing (officers & fire fighters)	Required vehicles	Actual Vehicles	Required agent	Actual agent
Adelaide	9	2 & 8	2 & 8	3	3	24,300	26,700
Adelaide (curfew)	5	1 & 2	1 & 4	1	2	5,400	17,800
Alice Springs	7	2 & 4	2 & 4	2	2	12,100	17,800
Avalon	8	2 & 6	2 & 6	3	3	18,200	26,700
Ayers Rock	6	1 & 4	1 & 4	2	2	7,900	17,800
Ballina	6	1 & 4	1 & 4	2	2	7,900	17,800
Brisbane ¹	9	2 & 8	3 & 11	3	4 + DRV ²	24,300	37,600
Brisbane	10	3 & 11	3 & 11	4	4 + DRV	32,300	37,600
Broome	6	1 & 4	1 & 4	2	2	7,900	17,800
Cairns	8	2 & 6	2 & 6	3	3	18,200	26,700
Canberra	8	2 & 6	2 & 6	3	3	18,200	26,700
Coffs Harbour	6	1 & 4	1 & 4	2	2	7,900	17,800
Coolangatta	8	2 & 6	2 & 6	3	3	18,200	26,700
Darwin	8	2 & 6	2 & 6	3	3	18,200	26,700
Gladstone	6	1 & 4	1 & 4	2	2	7,900	17,800
Hamilton Island	7	2 & 4	2 & 4	2	2	12,100	12,200
Hobart	7	2 & 4	2 & 4	2	2	12,100	17,800
Karratha	6	1 & 4	1 & 4	2	2	7,900	17,800
Launceston	7	2 & 4	2 & 4	2	2	12,100	17,800
Mackay	7	2 & 4	2 & 4	2	2	12,100	17,800
Melbourne	10	3 & 11	4 & 13	4	4 + DRV + specialised ladder vehicle ³	32,300	37,600
Newman	6	1 & 4	1 & 4	2	2	7,900	17,800
Perth ⁴	9	2 & 8	3 & 11	3	4 + DRV + specialised ladder vehicle	24,300	37,600
Perth	10	3 & 11	3 & 11	4	4 + DRV + specialised ladder vehicle	32,300	37,600

¹ Brisbane is a Category 9 aerodrome that is also approved by CASA to provide Category 10 services for Category 10 aircraft operations.

² DRV is a Domestic Response Vehicle better suited to responding to first aid call-outs or smaller terminal fires than the ultra-large fire vehicle

³ Melbourne also has access to the 3 fire vehicles available at the Melbourne central training facility

⁴ Perth is a Category 9 aerodrome that is also approved by CASA to provide Category 10 services for Category 10 aircraft operations.

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Location	Category	CASA approved staffing (officers & fire fighters)	Actual staffing (officers & fire fighters)	Required vehicles	Actual Vehicles	Required agent	Actual agent
Port Hedland	6	1 & 4	1 & 4	2	2	7,900	17,800
Rockhampton	6	1 & 4	1 & 4	2	2	7,900	17,800
Sunshine Coast	7	2 & 4	2 & 4	2	2	12,100	17,800
Sydney	10	3 & 11	4 & 13	5	5 + DRV + specialised ladder vehicle	32,300	46,500
Townsville	7	2 & 4	2 & 5	2	2	12,100	17,800