



Australian Government

Australian Government response to the
Senate Rural and Regional Affairs and Transport References
Committee report:

The Provision of Rescue, Firefighting and Emergency
Response at Australian Airports

November 2019

Introduction

The Australian Government welcomes the Senate Rural and Regional Affairs and Transport References Committee's report on *the Provision of Rescue, Firefighting and Emergency Response at Australian Airports*.

The Government acknowledges the valuable contribution of Aviation Rescue Fire Fighting Services (ARFFS) to the aviation safety system in Australia.

A number of the Committee's recommendations have already been acted on, such as the use of Task Resource Analysis (TRA) methodology to determine ARFFS staffing levels. Airservices Australia is progressing the TRA framework, and in 2019, commenced a national review utilising the TRA to ensure service delivery remains commensurate with the operating environment at each aerodrome.

In 2015, in response to the Aviation Safety Regulation Review, the Government received policy advice on a range of potential improvements to the efficiency and clarity of ARFFS requirements including the use of risk assessments. The policy advice resulted in a regulatory reform package with five key elements:

- maintaining existing arrangements for existing ARFFS locations;
- establishing a risk assessment process to determine future decisions about ARFFS;
- modernising the Manual of Standards (MoS) from a prescriptive to an outcomes-based approach;
- clarifying the role of ARFFS and arrangements with state/territory fire services; and
- clarifying the role of the airport operator to assist ARFFS through the provision of airport utilities such as roads, water supply and crash gates.

The current regulatory settings are set out in the Civil Aviation Safety Regulations (CASR) Regulation 139.H and the associated MoS. It is anticipated that new ARFFS regulations encompassed in a new CASR Part 176 will be established to give effect to the regulatory reform package. The Department of Infrastructure, Transport, Cities and Regional Development and the Civil Aviation Safety Authority (CASA) are working closely on the development of new regulations expected to come into effect in late 2020.

The Government is committed to maintaining a safe aviation environment while seeking to reduce regulatory burden on industry and improve service delivery. As part of the overall aviation safety system, the Government is committed to ensuring Australia's airports continue to have the appropriate level of rescue, firefighting and emergency response services now and into the future.

Recommendations of the Senate Committee

Recommendation One

The committee recommends that the Australian Government conduct a review of Australia's adherence to the International Civil Aviation Organization Standards and Recommended Practices for the provision of Aviation Rescue Fire Fighting Services in Australia. The review should consider:

- *Subpart 139.H of the Civil Aviation Safety Regulations 1998;*
- *the associated Manual of Standards;*
- *Australia's adherence to Chapter 9 of Annex 14 of the Chicago Convention; and*
- *Any other relevant regulations, standards and procedures (including those issued by the National Fire Protection Association).*

Where the review identifies non-compliance with international standards, the rationale for this should be explained.

The Government **supports** this recommendation.

In response to the outcomes of the 2015 ARFFS policy review, which provided advice on a range of potential improvements to the efficiency and clarity of ARFFS requirements, CASA is updating the regulatory framework for ARFFS. As part of this work, CASA will undertake a gap analysis of the existing regulations against Annex 14 of the Chicago Convention, and supporting annexes, to ensure the updated regulations and associated MoS are aligned to meet Australia's international responsibilities to the International Civil Aviation Organization (ICAO). Australia's primary commitment is to adhere to the ICAO Standards and Recommended Practices.

Recommendation Two

The committee recommends that the Civil Aviation Safety Authority conduct an audit of all Aviation Rescue Fire Fighting Service (ARFFS) vehicles and equipment currently in operation across Australia, to determine the level of compliance with the International Civil Aviation Organization standards, and associated Australian regulations and standards (such as the Civil Aviation Safety Regulations 1998 and the Manual of Standards). The audit should consider whether the vehicles and equipment adhere to the relevant ARFFS airport category at each aerodrome.

The Government **supports** this recommendation.

CASA conducts routine surveillance of ARFFS vehicles and equipment. This surveillance confirms that Airservices ARFFS is compliant with CASR Subpart 139.H and the MoS Part 139H. Surveillance includes audits and operational checks that assess systems and products in addition to gathering evidence, data, information and intelligence.

The updated ARFFS regulatory framework will require the inventory of ARFFS equipment to be determined using the outcomes of a local operational analysis that is approved by CASA and references ICAO guidance material in the ICAO standards. The framework will determine what ARFFS vehicles and equipment will be required to meet the ICAO standards.

Recommendation Three

The committee recommends that the Civil Aviation Safety Authority implement a testing program for the firefighting foams in use at Australian airports, in accordance with International Civil Aviation Organization guidelines. The testing should take place under conditions unique to Australia (such as higher ambient temperatures), to establish whether the foams operate effectively to extinguish aviation fires.

The Government **supports** this recommendation.

The ICAO foam test is designed as a standard test that ensures suitable foam capability/performance for use in a vast range of climatic conditions world-wide. Australia does not have any specific or unique climatic conditions warranting a non-compliant or non-standard test. The Government supports ongoing performance testing.

Currently, as part of the procurement process for firefighting foam in use at Australian airports, Airservices requires the manufacturer to provide certification from an approved laboratory that the foam is compliant with ICAO guidelines.

The updated ARFFS regulatory framework will require ARFFS providers to undertake a strengthened testing regime of operational foam, noting it is not CASA's role to implement a testing program, but rather regulate the testing process. This will include a full range of performance tests which will better simulate Australian conditions, due to the varied environmental conditions that may exceed the minimum test criteria specified by ICAO.

Recommendation Four

The committee recommends that the Civil Aviation Safety Authority mandates that Aviation Rescue Fire Fighting Service (ARFFS) providers use the Task Resource Analysis (TRA) methodology, as prescribed by the International Civil Aviation Organization, to determine the suitable staffing levels for ARFFS at all aerodromes in Australia where an ARFFS is provided. The TRA should take into consideration the category of each aerodrome.

The Government **supports** this recommendation.

The use of the TRA methodology assists ARFFS providers in determining the tasks required of ARFFS personnel and seeks to identify the minimum number of personnel required to undertake the identified tasks.

Airservices is progressing the development and testing of the TRA methodology across its 27 ARFFS locations. The design and implementation of TRA is highly complex and must fully conform to the relevant TRA obligations and guidance materials.

The updated ARFFS regulatory framework will incorporate the TRA process as detailed in the ICAO guidelines. CASA must be assured that Airservices complies with this process as it develops and implements the use of a TRA at each ARFFS location.

Recommendation Five

The committee recommends that the Civil Aviation Safety Authority mandate that the Task Resource Analysis (TRA) process undertaken by Airservices must involve appropriate consultation, via the direct engagement of Aviation Rescue Fire Fighting staff and officers at all stages of the TRA process. The consultation should be transparent, and the outcomes made publicly available as soon as is practicable.

The Government **supports** this recommendation.

The TRA process requires the involvement of a committee or working group that includes experienced firefighters from the aerodrome. Under the updated regulatory framework, the TRA process and outcomes must be approved by CASA to ensure an acceptable level of oversight.

Recommendation Six

The committee recommends that the Australian Government introduce legislation which stipulates the minimum Aviation Rescue Fire Fighting (ARFF) staffing level in accordance with airport category, at all Australian aerodromes where an ARFF service is provided. The legislated staffing levels should reflect the outcomes of the Task Resource Analysis at each aerodrome.

The Government **notes** this recommendation.

The Government supports the use of the TRA to determine minimum staffing levels at each Australian aerodrome, however does not consider that staffing levels should be legislated in the CASR.

The purpose of the TRA is to identify the minimum number of personnel required to undertake identified tasks at each aerodrome. A benefit of using TRA is that staffing numbers can be rapidly adjusted in response to any changes in workload or tasking. Stipulating staffing numbers in legislation is inconsistent with the TRA approach. TRAs will be reviewed on a regular basis to ensure up-to-date information is used in the allocation of resources. Legislating staffing numbers does not provide the flexibility required for the ARFFS provider to use the TRA as designed. Further, legislating staffing numbers is not an approach used by any other country.

The updated regulatory framework will require the ARFFS provider to conduct a local operational resource analysis (ORA), which will incorporate a TRA. The ORA will determine each aerodrome's potential emergency incident types for which the ARFFS provider must have the necessary resources, personnel and infrastructure required to achieve regulatory compliance. The TRA will articulate the minimum staffing required to achieve the outcomes determined by the ORA. Both the ORA and TRA must be approved by CASA. The Government considers that this process provides the necessary rigour in the system without the need for staffing levels to be identified in legislation.

Recommendation Seven

The committee recommends that the Department of Infrastructure, Transport, Cities, and Regional Development undertake a review of the current establishment criteria used for determining whether to implement an Aviation Rescue Fire Fighting Service (ARFFS). The review should consider whether the current methodology of utilising passenger numbers allows for sufficient provision of ARFFS across Australian aerodromes, in light of increasing passenger numbers in recent years.

The Government **notes** this recommendation.

The 2015 ARFFS policy review conducted by the then Department of Infrastructure and Regional Development examined the establishment criteria of ARFFS. Importantly, the review found that generic measures of airport activity, such as passenger numbers, while a useful indicator of the possible need for ARFFS, should be supplemented by assessing other risk factors at each airport.

Following industry consultation, the Government adopted a methodology whereby an ARFFS is required at a location when a relevant trigger event occurs and where CASA decides, after conducting a risk review, that ARFFS is required at that location. Such an approach considers the operational environment of each airport, as opposed to a 'one size fits all' approach. In 2018, the Deputy Prime Minister confirmed that the two measures that constitute a trigger event are the receipt of scheduled international passenger air services; or 350,000 passengers on scheduled commercial air services passing through the airport during a twelve-month period.

Two measures constitute a trigger event for the conduct of a risk review relating to the disestablishment of an ARFFS – withdrawal of scheduled international passenger air services or passenger numbers on scheduled commercial air services falling below 300,000 and remaining below this level for a twelve month period.

The review also noted that as passenger numbers increase, the number of airports serviced by ARFFS increases, thereby covering a greater proportion of the travelling public. When the 350,000 establishment threshold was introduced in 2002, 90 per cent of passengers were covered; today, 96 per cent of passengers that fly into or out of an airport are covered by ARFFS.

Recommendation Eight

The committee recommends that the Australian Government mandate the establishment of a Task Resource Analysis for Domestic Response Services responding to emergencies at aerodromes (DRS TRA). The DRS TRA should determine the additional Aviation Rescue and Fire Fighting (ARFF) staff required for responses to non-regulated and non-aviation emergencies across the aerodrome, over and above the staff required for an ARFF station to maintain category in the case of an aviation emergency.

The Government **does not support** this recommendation.

The primary role of ARFFS is to optimise the chances of the survival of passengers and crew in the event of an aircraft accident.

The CASR do not require ARFFS to respond to emergencies not related to regulated service delivery (such as requests for first aid assistance in a terminal). However, ARFFS often respond to requests for assistance when resources are available, and when the response will not compromise the primary role related to aviation safety. Responses to non-regulated and non-aviation emergencies across the aerodrome are conducted on a case-by-case basis at the discretion of the Officer in Charge, noting that this work can be a useful means for officers to maintain their operational skills and readiness. In 2017-18, Airservices ARFFS responded to over 4,000 such emergencies.

ICAO recommends the use of TRA for the provision of resources for aviation related accidents. This methodology is not suitable for determining the resources for domestic responses.

While recognising the important contribution ARFFS makes to community safety by responding to non-regulated emergencies, the Government considers the current mandate for ARFFS to concentrate on aviation incidents adheres to the ICAO standards and is appropriate. The new Part 176 will incorporate a requirement for the ARFFS provider to ensure that non-regulatory functions do not compromise the delivery of an ARFFS as determined through a location specific ORA and TRA.