

CASA Surveillance Manual Annex 6 - Part 139 H Aviation Rescue Fire Fighting Services (ARFFS) Providers



Acknowledgement of Country

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Artwork: James Baban.

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Introduction

This annex is an integral part of the CASA Surveillance Manual (CSM), which should be referenced at all times. To allow for more frequent revisions, this annex can be updated independent of the CSM and other annexes. The process of updating this annex requires verification and approval from its owners and sponsors.

Revision history

Revisions to this annex are recorded below in order of most recent first.

Table 1. Revision history

Version number	Date	Parts and sections	Details
6.0	May 2025	All	Transfer to new manual template Removal of health check references
5.1	January 2023	Section 2	Updates to CSM references
5.0	December 2019	Section 2.1	Change of where to locate health check mandatory elements
4.0	April 2019	Inclusion of Introduction and Revision history	These inclusions allow for updates and revisions independent of the CSM and other annexes.
		Section 2.1	Removal of recommended health check timeframes.
		Section 3	Removal of recommended surveillance intervals.
		Section 4	Addition of third-party audits.

1 Overview

This annex provides instructions for conducting surveillance of CASR Part 139 H Aerodrome Aviation Rescue and Fire Fighting Services and contains information relating to the following:

- Systems and elements
- Surveillance currency guide
- Information sources.

2 Systems and elements: ARFFS providers

The audit technique involves assessing the documented system, comparing it against the actual system processes. The system is assessed for compliance and sampling conducted as appropriate. The assessment of the system is achieved by a questioning technique using the four attributes (12 components) of the Management System Model (MSM), see CSM Sections on System attributes – Management System Model and Systems attributes (table).

The CASA description of ARFFS consists of four systems incorporating 14 elements.

Table 2. Systems and elements

Systems	Elements
	Maintenance system
Maintenance	Maintenance process
	Maintenance assurance
	ARFFS operations
	Emergency response
Operations	Data and documents
	Support systems
	Communications
Personnel	Personnel standards
Personner	Personnel rostering
	Safety policy and objectives
Safatu managamant	Safety risk management
Safety management	Safety assurance
	Safety promotion

Table 3. Maintenance elements

System: Maintenance

Element: Maintenance system

The maintenance system element describes the systems and the processes for achieving the 'What' maintenance activities are required to be done and 'When' the maintenance activities are to be completed.

Prompts

Regulatory requirements	Facility and maintenance plan
Service and facility management requirements	Vehicle performance
Test equipment performance criteria	Ancillary equipment

Element: Maintenance process

The works control element describes the systems and the processes for achieving the 'How' works activities are conducted and 'Who' completes the works activities.

Prompts

Mechanical workshops	Firefighting personnel
Emergency Vehicle Technicians (EVT)	

Element: Maintenance assurance

The maintenance assurance element describes the systems and the processes for ensuring the ARFFS systems are fit for service. This is accomplished primarily through the authorisation holder's internal audit processes and closes the loop on the entire maintenance system.

Prompts

Quality assurance processes and/or activities, must	
include internal audit processes but may also	
include external or third-party review	

Table 4. Operations elements

System: Operations

Element: ARFFS operations

The ARFFS operations element addresses the systems that ensure the authorisation holder contains its operations to those authorised by legislation. This is primarily achieved using a properly structured organisation with appropriate communication channels. Appropriate key personnel are a key link in ensuring ARFFS' operations are not only contained but are appropriately controlled. Examples include the Officer in Charge.

Prompts	
Fire station facilities	Fire vehicles
Fire fighters	Fire Station Control Centre (FSCC)
Operational structure	Operational procedures

Element: Emergency response

The emergency response element describes the systems that make up the control of all aspects associated with provision of a timely emergency response. The documented system should address but not be limited to response times, location matters, third party providers and issues of security aspects relating to personnel, vehicles, equipment of any sort within the confines of the ARFFS area of responsibility.

Prompts	
Response times	ASICs
State or territory fire brigades	Aviation fire vehicles
Operational procedures	Sufficient trained/qualified operational firefighters and supervisors

Element: Data and documents

The data and documents element addresses all technical data, design drawings, regulatory documentation and quality/procedures manuals used in the course of carrying out ARFFS operations.

Prompts	
Operations manual	Documentation and data control
Change management	Aviation Fire Fighting Manuals (AFFM)
Records	DAMP documentation

Operations elements continued

System: Operations

Element: Support systems

The support system element addresses all aspect of operations that go into supporting the objectives of the authorisation holder. This may include but is not limited aspects such as managing the use of computer systems, providing resources for travel and appropriate support facilities.

Prompts	
Transportation	Computers
Portable electronic devices	Facilities
Third party and/or service agreements	

Element: Communications

The communications element addresses aspects of the authorisation holders operation related to internal and external communications and includes but is not limited to, communications with staff while in the field, use of obsolete or damaged equipment and communication links with other relevant parties.

Prompts Fire station communication systems Organisational intranet systems Fire vehicle and/or handheld communication systems Arrangements with aerodrome operators, for example, Aerodrome Emergency Plan

Table 5. Personnel elements

System: Personnel

Element: Personnel standards

The ARFFS authorisation holder is required to establish and maintain an appropriate organisation, with sound and effective management structure that incorporates a safety management system. The standards of personnel, including third party providers is required to be documented detailing induction training, periodic recurrent training/checking and any required upgrade training. A process for dealing with unsatisfactory performance should also be documented.

Prompts		
Recruitment	Medical/physical fitness	
Staffing and training requirements	Protective clothing	
Competency	Training facilities and/or provider	
Qualifications	DAMP education and testing	
DAMP supervision		

Element: Personnel rostering

Personnel rostering plays a significant role in achieving safe operations for it is through rostering that the authorisation holder ensures that required tasks are carried out with appropriate personnel that have appropriate qualifications, operate in accordance with legislative requirements, approval and have appropriate recency (if applicable) to safely conduct the task from the start of the duty period until completion. Rostering should take into consideration fatigue factors associated with long duty days or latenight duty. The roster should, where appropriate, be published and displayed in a prominent position.

Prompts	
Roster production/Business hours of operation	Qualifications
Approval	Competency
Roster periods cover advertised hours of ARFF service delivery	

Table 6. Safety management elements

System: Safety management

Element: Safety policy and objectives

The element contains the systems and processes that ensure effective governance to support the safety management system are in place, this will include processes for the review and update of the authorisation holder's management and commitment (through Safety Policy, Just Culture and Safety Objectives), the appointment of key personnel, the accountabilities of management and Safety Management System (SMS) documentation.

Prompts			
Management commitment and responsibility – safety policy	Management commitment and responsibility – just culture		
Appointment of key personnel	Relevant third-party relationships and interactions		
Management commitment and responsibility – safety objectives	SMS documentation		
Safety accountabilities of managers and staff			

Element: Safety risk management

This element contains the systems and processes to ensure investigation, and analysis, of the safety risks associated with identified hazards resulting in the implementation of effective safety risk controls.

Prompts		
Hazard identification processes - reactive	Operational risk assessment and mitigation strategies that assure an appropriate response to aerodrome hazards	
Hazard identification processes - proactive	DAMP supervision	

Safety management elements continued

System: Safety management

Element: Safety assurance

This element contains the systems and processes for setting, recording and evaluating system performance, conformance with regulations and company procedures, a process for the conduct of internal safety investigations, effectively manage change across the aviation activities conducted and drive continuous improvement of the SMS.

Prompts

Frompts	ompts		
Internal safety investigation	Management of change		
Safety performance monitoring and assessment – assurance	Safety performance monitoring and assessment – system performance		
Safety performance monitoring and assessment – flight data analysis	Interpretation or change of level of operational service		
Establishment/Disestablishment of ARFFS	Accident/incident reports		
Determining category	Quality control		
Continuous improvement of SMS	Contingency Plans		
DAMP supervision			

Element: Safety promotion

This element contains the systems and processes for ensuring personnel are appropriately trained, are aware of the SMS to a degree commensurate with their positions that conveys safety-critical information, explains why particular safety actions are taken, and explains why safety procedures are introduced or changed must be evident.

Prompts

Training and education	Safety communication	
DAMP education and testing		

3 Surveillance currency guide: ARFFS providers

Table 7. Surveillance currency guide

Surveillance level	Туре	Elements
Level 1	System audit	Systems and compliance
	Post-authorisation Review	Entry control elements
Level 2	Operational check	e.g. Response capability, training delivery

Note: Surveillance intervals are determined by the National Oversight Plan (NOP). Refer to the NOP surveillance schedule for further information regarding surveillance intervals.

4 Information sources

The following is a non-exhaustive list of information sources that can be accessed to support the assessment:

- past Surveillance Reports in Sky Sentinel
- surveys
- third-party audits
- regulatory history, Findings
- EAP information
- Defect Report Service (DRS)
- Regulatory Service activity
- information gathered by the authorisation holder
- external information gathered from industry or other government agencies
- Enforcement action
- past accident/incident history
- risk management plans provided by the authorisation holder.
- Safety plans and safety cases

Most of this information is available to CASA staff via the Power BI application.

Note: For advice on where and how to access required information refer to CSM Information Capture and Access.