



## **Annex 5**

# **Approved Maintenance Organisations (AMO)**

## 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, as well as from Coordination and Safety Systems (CSS). An updated version can only be published once CSS has finalised the format, with the latest revision history data included in the revision table.

## Revision history

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

Version Nº.	Date	Parts / sections	Details
5.2	July 2021	Section 2	Addition of Internal Audit prompt within both Process in Practice and Safety Assurance
5.1	May 2021	Section 2	Addition of Process in Practice, DAMP and DG System and Elements
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.
4.0	April 2019	Section 2.1	Removal of recommended Health Check timeframes.
4.0	April 2019	Section 3	Removal of recommended surveillance intervals.
4.0	April 2019	Section 4	Addition of third-party audits.

## 1 Overview

This Annex provides instructions for conducting surveillance of Approved Maintenance Organisations (AMO), including CAR 30 Certificates of Approval and CASR Part 145, and contains information relating to the following:

- Systems and Elements
- Systems and Elements – Health Checks
- Surveillance Currency Guide
- Information Sources.

## 2 Systems and Elements: AMO

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 and its risks is achieved by a questioning technique using the four attributes (12 components) of the Management System Model (MSM), see CSM Sections 3.3.3 System attributes – Management System Model and Section 3.3.3.1 – Systems attributes (table).

The CASA description of an AMO consists of three systems and 12 elements.

**Table 1: System and Elements**

<b>Systems</b>	<b>Elements</b>
<b>Aircraft Maintenance</b>	Tooling and Equipment
	Data and Documents
	Stores and Distribution
	Maintenance Activity
	Process in Practice
<b>Administration</b>	AMO Operations
	Personnel Standards
	Personnel Rostering
<b>Safety Management</b>	Safety Policy and Objectives
	Safety Risk Management
	Safety Assurance
	Safety Promotion

<b>DAMP</b>	Drug & Alcohol education program
	Drug & Alcohol response program
	Drug & Alcohol testing program
	Implementation of DAMP

<b>Dangerous Goods</b>	DG Process & Procedures
	DG Records
	DG Training Records

Table 2: Aircraft Maintenance Elements

<b>SYSTEM: Aircraft Maintenance</b>	
<b>ELEMENT: Tooling and Equipment</b>	
This element includes all tooling and equipment held, used, contracted, loaned, or borrowed by the organisation for the purpose of maintaining aircraft or aeronautical products.	
<b>Prompts:</b>	
Availability /Adequacy (dependent upon planned activities)	Disposal
Identification (traceability, history, correction, and status)	Parts pooling
Calibration	Training on specialised tooling/equipment
Storage/protection	Ground support equipment availability and serviceability
Maintenance	Responsibility for control
Parts Borrowing /Lending	Review of tool control, monitoring and improvement
Contracting	
<b>ELEMENT: Data and Documents</b>	
This element includes all technical data, design drawings, regulatory documentation, maintenance systems and quality/procedures manuals used in the course of carrying out aircraft or aeronautical product maintenance.	
<b>Prompts:</b>	
Availability / Adequacy (dependent upon planned activities)	DAMP documentation
Identification	Borrowing/lending
Storage	Responsible and accountable

<b>SYSTEM: Aircraft Maintenance</b>	
Handling	Monitoring and improvement
<b>ELEMENT: Stores and Distribution</b>	
This element includes the acquisition, storage and handling of all parts, components, materials, and consumable goods used, kept, loaned, or borrowed while carrying out aircraft or aeronautical product maintenance.	
<b>Prompts:</b>	
Purchasing	Borrowing/lending
Receipt	Dispatch /issue
Storage	Quarantine/rejection
Handling	Traceability
<b>ELEMENT: Maintenance Activity</b>	
This element includes all aircraft and aeronautical product maintenance and may be applied to each maintenance activity separately.	
<b>Prompts:</b>	
Receipt (job/task acceptance)	Housekeeping (work in progress control and cleanliness)
Task assignment	Dispatch (return to customer)
Contracting	Organisation structure, duties, and responsibilities
Inspection	Infrastructure
Repair/Manufacture In The Course Of Maintenance (MITCOM)	Multiple and temporary site control
Modification	Activity within Certificate scope
Certification	Training
Defect reporting	Computer control
Defect deferral	Component and aircraft release documentation
Shift changing	Monitoring and improvement
<b>ELEMENT: Process in Practice</b>	
This element includes the monitoring and management of tooling, data and the certification of maintenance while conducting aircraft and aeronautical product maintenance.	
<b>Prompts:</b>	
Tooling and equipment availability	Calibrated tooling traceability
Accessing and using approved data	Certifying for stages of maintenance
Accessing stores and recording of parts	MITCOM process
Assigning of personnel to tasks	Borrowing tools process
Internal Audit	

<b>SYSTEM: Aircraft Maintenance</b>	
Training on aircraft and specialized tooling	Licence scope
Human factors issues	SMS Reporting

Table 3: Administration Elements

<b>SYSTEM: Administration</b>	
<b>ELEMENT: AMO Operations</b>	
<p>This element addresses the systems that ensure the Authorisation holder contains its operations to those authorised by legislation. This is primarily achieved through the use of a properly structured organisation with appropriate communication channels. Appropriate key personnel are a key link in ensuring AMO operations are not only contained but are appropriately controlled. Examples include the Responsible Manager (however named) and Safety Manager (however named).</p>	
<b>Prompts:</b>	
Appropriate structure	Key personnel
Appropriate numbers of personnel	Facilities
Support staff	Technical staff
<b>ELEMENT: Personnel Standards</b>	
<p>AMO authorisation holder is required to establish and maintain an appropriate organisation, with sound and effective management structure that incorporates a safety management system where applicable. The standards of personnel, including third party providers is required to be documented detailing induction training, periodic recurrent training and any required upgrade training. A process for dealing with unsatisfactory performance should also be documented.</p>	
<b>Prompts:</b>	
Qualifications	Licensing
Recency (if applicable)	Supervision
DAMP education and testing	
<b>ELEMENT: Personnel Rostering</b>	
<p>This element plays a significant role in achieving safe operations for it is through scheduling that the authorisation holder ensures that required tasks are carried out with appropriate personnel that have appropriate qualifications, operate in accordance with legislative requirements, certification and have appropriate recency (if applicable) in order to safely conduct the planned task from the start of the duty period until completion. Scheduling should take into consideration fatigue factors associated with long duty days or late-night duty. A roster should, where appropriate, be published and displayed in a prominent position</p>	
<b>Prompts:</b>	
Roster production	Fatigue issues
Qualifications	Recency
Certification	SMS documentation
Safety accountabilities of managers	DAMP supervision



Table 4: Safety Management Elements

<b>SYSTEM: Safety Management</b>	
<b>ELEMENT: Safety Policy and Objectives</b>	
This element contains the systems and processes that ensure effective governance to support the safety management system that is in place, including 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, the Emergency Response Plan and SMS documentation.	
<b>Prompts:</b>	
Safety policy	Key personnel
Just culture	Third party relationships and interactions
Safety objectives	Emergency response plan
Safety accountabilities of managers	SMS documentation
<b>ELEMENT: Safety Risk Management</b>	
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.	
<b>Prompts:</b>	
Hazard identification processes - reactive	Risk assessment and mitigation
Hazard identification processes - proactive	DAMP supervision
<b>ELEMENT: Safety Assurance</b>	
This element contains the systems and processes for setting, recording, and evaluating system performance, conformance with regulations and company procedures, a process for conducting internal safety investigations, effectively managing change across the aviation activities conducted and driving continuous improvement of the SMS.	
<b>Prompts:</b>	
System performance	Management of change
Assurance	Continuous improvement of SMS
Internal safety investigation	DAMP supervision
Internal Audit	
<b>ELEMENT: Safety Promotion</b>	
This element contains the systems and processes for ensuring personnel are appropriately trained and are aware of the SMS to a degree commensurate with their positions, safety-critical information is conveyed, explains why particular safety actions are taken and explains why safety procedures are introduced or changed must be evident.	
<b>Prompts:</b>	
Training and education	Safety communication

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**SYSTEM: Safety Management**

DAMP education and testing	
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Table 5:DAMP Elements

<b>SYSTEM: DAMP</b>	
<b>Element: Drug and alcohol education program</b>	
This element contains the systems and processes to ensure that personnel have adequate knowledge of the organisation's drug and alcohol policy, testing program, response program, and any support services, by implementation of the drug and alcohol education program.	
<b>Prompts:</b>	
DAMP policy	Risks associated with alcohol and drug use
Alcohol and drug testing program	Support and assistance services
Safety promotion and communication	Method of training delivery
Recurrency	Training records management
<b>ELEMENT: Drug and alcohol testing program</b>	
This element contains the systems and processes for ensuring that personnel are appropriately tested under the alcohol and drug testing program, and there is a robust system for records management.	
<b>Prompts:</b>	
Testing Standards	Circumstances for testing
Ceasing SSAA	Records management
<b>ELEMENT: Drug and alcohol response program</b>	
This element contains the systems and processes for ensuring there is adequate process that follows the drug and alcohol drug testing program, including an adequate process for determining when personnel may be deemed as fit for duty and returned to SSAA (if applicable).	
<b>Prompts:</b>	
Medical Review Officer (MRO)	Ceasing SSAA
Intervention program	Return to SSAA

Table 6: Dangerous Goods Elements

<b>SYSTEM: DANGEROUS GOODS (DG)</b>	
<b>ELEMENT: DG Processes and Procedures</b>	
This element contains the systems and processes for ensuring there is adequate process that follows the AMO procedures and legislative requirements for handling and shipping of DG	
<b>Prompts:</b>	
DG Shipping Procedures	Shipping of DG by Air Requirements
Packing standards and instructions	Technical information (i.e., Safety Data Sheets)
Classification of DG	Markings and labels
<b>ELEMENT: DG Records</b>	
This element contains the systems and processes for ensuring there is adequate process that follows the AMO procedures and legislative requirements for maintaining DG records	
<b>Prompts:</b>	
DG transport documentation	Receipt and dispatch records
<b>ELEMENT: DG Training Records</b>	
This element contains the systems and processes for ensuring there is adequate process that follows the AMO procedures and legislative requirements for maintaining DG Training records.	
<b>Prompts:</b>	
Procedures and legislative requirements	Review DG Training Records
List of Personnel authorised to ship DG	Management of training recurrency
Training records	

## 2.1 Health Check

Health Check mandatory elements are available on the CASA Intranet. Details of the current mandatory elements for each authorisation type are published separately to the CASA website.

### 3 Surveillance Currency Guide: AMO

Surveillance level	Type	Elements
Level 1	Systems Audit	Systems, Risks and Compliance
	Health Check	Specific Elements, Risks and Compliance
	Post-authorisation Review	Entry Control Elements
Level 2	Operational Check	E.g., Aircraft inspection, Ramp check

**Note:** Surveillance intervals are determined by the National Surveillance Selection Process (NSSP). Refer to the NSSP planned 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 of an authorisation holder:

- surveys
- third-party audits
- regulatory history, findings (Safety Findings and Safety Observations)
- past Surveillance Reports and findings (Safety Findings and Safety Observations)
- 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.

A large portion of this information is available to the surveillance team and authorisation management team via the Data Warehouse using the BusinessObjects application.

**Note:** For advice on where and how to access required information refer to CSM Chapter 5 – Information Capture and Access.