Australian Government
Civil Aviation Safety Authority

CASA Surveillance Manual
Annex 5 - Approved Maintenance Organisations

September 2023

Acknowledgement of Country

The Civil Aviation Safety Authority (CASA) respectfully acknowledges the Traditional Custodians of the lands on which our offices are located and their continuing connection to land, water and community, and pays respect to Elders past, present and emerging.

Inside front cover artwork: James Baban.

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This document contains guidance material intended to assist CASA officers, delegates and the aviation industry in understanding the operation of the aviation legislation. However, you should not rely on this document as a legal reference. Refer to the civil aviation legislation including the *Civil Aviation Act 1988* (Cth), its related regulations and any other legislative instruments—to ascertain the requirements of, and the obligations imposed by or under, the law.

Contents

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
5.5	September 2024	Section 2 and 3	Added surveillance intervals multi-year surveillance added
		Section 3	Added multi-year surveillance guidance
		Throughout	Removed of Health Check references
5.4	May 2023	Section 2	Amend Process in Practice to Operational Demonstration
			Moved prompt Quality Audit Program from Aircraft Maintenance/ Process in Practice to Administration/AMO Operations
5.3	November 2021	Section 2	Added **Safety Management system and elements are applicable to a Part 145 organisation only**
		Table 1	Added of DG Systems and Elements
		Table 2	Removed of DAMP documentation
			Amend Internal Audit to Quality Audit program
			Removed Repair from MITCOM
			Added of FITCOM
			Removed of Human Factors Issues
			Removed of SMS Reporting
			Added of Licence scope
		Table 3	Removed of DAMP education and testing
			Removed of SMS documentation
			Removed of Safety accountabilities of managers
			Removed of DAMP supervision
		Table 4	Title changes to include (Part 145 Organisations only)
			Removed of DAMP supervision
			Amend System performance to System performance monitoring (SPIs)

Version number	Date	Parts and sections	Details
5.3	November 2021	Table 4	Amend Internal Audit to Internal safety audit
			Removed DAMP supervision
		Table 5	Removed Table 5 DAMP Elements
5.2	July 2021	Section 2	Added of Internal Audit prompt within both Process in Practice and Safety Assurance
5.1	May 2021	Section 2	Added of Process in Practice, DAMP and DG System and Elements
5.0	December 2019	Section 2.1	Changed 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	Removed of recommended Health Check timeframes.
		Section 3	Removed of recommended surveillance intervals.
		Section 4	Added 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:

- Surveillance intervals
- Multi-year surveillance
- Systems and elements
- Surveillance currency guide
- Technical Arrangement on Aviation Maintenance Between CASA and JCAB (TA-M)
- Information sources.

2 Surveillance Intervals

Table 2. Surveillance intervals by Group

Group	Certificate/ Part	Activities (in priority order)	Period (Y)	No. of events	Cycle (M)	Scope coverage
AMO Part 145						
AW-A	AMO Part 145 - Overseas		3	1	36	All Applicable
AW-B	AMO Part 145 – Tier 1	Maintenance of aircraft Maintenance of complete engines and/or propellers	5	2	30	All Applicable
AW-C	AMO Part 145 – Tier 2	Maintenance of Class II or III products	5	1	60	All Applicable
COA CAR 30						
AW-D	COA CAR 30 – Overseas		3	1	36	All Applicable
AW-E	COA CAR 30 – Tier 1	Maintenance of aircraft, other than balloons, airships and non-type certificated historical or ex-military aircraft Maintenance of complete engines and/or propellers	4	1	48	All Applicable
AW-F	COA CAR 30 – Tier 2	Maintenance of Class II or III products Maintenance of balloons and/or airships Maintenance of non-type certificated historical or ex-military aircraft	5	1	60	All Applicable
AW-G	COA CAR 30 – Tier 3	Distribution certificate	5	1	60	Core

3 Multi-year surveillance

The multi-year National Oversight Plan (NOP) surveillance schedule has the following elements to ensure a consistent and repeatable approach to surveillance strategy.

Each authorisation holder is assigned to a group to ensure a consistent oversight approach to similar operators. Where an authorisation holder holds multiple certificates within the same ‘discipline’ (i.e. Flight Operations or Airworthiness), one will be determined as primary and will drive the timing requirements for that authorisation holder. This will generally be the certificate with the lowest ‘cycle’ (i.e. highest frequency of events required).

Each group has an oversight period of between 3 and 5 years to ensure a consistent level of oversight over a set period of time. This oversight period may be aligned with the validity period of a certificate where practical.

Each group has a number of events and a cycle assigned to ensure that a consistent number of events are carried out in each group over the oversight period.

Each group has defined scope coverage to be achieved during the oversight period to ensure consistency in the areas assessed for compliance. Scope is defined as either;

Core = only core scope to be assessed within oversight period, at each planned event.

Extended = an extended set of scope to be assessed within oversight period – core scope to be assessed at each event, and extended scope to be divided between planned events within period. This means that some areas will not be subject to surveillance.

All Applicable = all applicable scope to be assessed within oversight period – core scope to be assessed at each event, and all applicable remaining scope to be divided between planned events within period. Applicable scope may be determined by part or by individual operator based on activities carried out or on an assessment of the operator / legislative part.

Groups, cycles and scope coverage has been determined by the risk profile of each certificate

A Post Authorisation Review (PAR) will also be carried out on all new operators within 12-18 months after approval.

4 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 on System attributes – Management System Model and section on Systems attributes (table).

The CASA description of an AMO consists of four systems and 15 elements.

> **Note:** Safety management system and elements are applicable to a Part 145 organisation only

Table 3. Systems and elements

Systems	Elements
Aircraft Maintenance	Tooling and equipment
	Data and documents
	Stores and distribution
	Maintenance activity
	Operational demonstration
Administration	AMO operations
	Personnel standards
	Personnel rostering
Safety management	Safety policy and objectives
	Safety risk management
	Safety assurance
	Safety promotion
Dangerous goods	DG process & procedures
	DG records
	DG training records

Table 4. Aircraft Maintenance Elements

System: Aircraft Maintenance	
Element: Tooling and equipment	
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.	
Prompts	
Availability / adequacy (dependent upon planned activities)	Identification (traceability, history, correction, and status)
Disposal	Parts pooling
Calibration	Training on specialised tooling / equipment
Review of tool control, monitoring and improvement	Ground support equipment availability and serviceability
Maintenance	Responsibility for control
Parts borrowing/lending	Storage/protection
Contracting	
Element: Data and documents	
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.	
Prompts	
Availability / adequacy (dependent upon planned activities)	Monitoring and improvement
Identification	Borrowing/lending
Storage	Responsible and accountable
Handling	
Element: Stores and distribution	
This element describes 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.	
Prompts	
Purchasing	Borrowing / lending
Receipt	Dispatch / issue
Storage	Quarantine / rejection
Handling	Traceability

System: Aircraft maintenance continued	
Element: Maintenance activity	
This element includes all aircraft and aeronautical product maintenance and may be applied to each maintenance activity separately.	
Prompts	
Receipt (job/task acceptance)	Inspection
Organisation structure, duties, and responsibilities	Housekeeping (work in progress control and cleanliness)
Fabrication In the Course Of Maintenance (FITCOM) dispatch (return to customer)	Manufacture In The Course Of Maintenance (MITCOM)
Task assignment	Infrastructure
Shift changing	Multiple and temporary site control
Contracting	Monitoring and improvement
Modification	Activity within certificate scope
Certification	Training
Defect reporting	Computer control
Defect deferral	Component and aircraft release documentation
Element: Operational Demonstration	
This element includes the monitoring and management of tooling, data and the certification of maintenance while conducting aircraft and aeronautical product maintenance.	
Prompts	
Tooling and equipment availability	Calibrated tooling traceability
Accessing and using approved data	Certifying for stages of maintenance
Accessing stores and recording of parts	MITCOM / FITCOM process
Assigning of personnel to tasks	Borrowing tools process
Training on aircraft and specialized tooling	Licence scope

Table 5. Administration Elements

System: Administration	
Element: AMO operations	
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 appropriate controlled. Examples include the Responsible Manager (however named) and Safety Manager (however named).	
Prompts	
Appropriate structure	Key personnel
Appropriate numbers of personnel	Facilities
Support staff	Technical staff
Quality audit program	
Element: Personnel standards	
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.	
Prompts	
Qualifications	Licensing
Recency (if applicable)	Supervision
Element: Personnel rostering	
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.	
Prompts	
Roster production	Fatigue issues
Qualifications	Recency
Certification	

Table 6. Safety Management Elements

System: Safety management (Part 145 organisations only)	
Element: Safety policy and objectives	
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.	
Prompts	
Safety policy	Key personnel
Just culture	Third party relationships and interactions
Safety objectives	Emergency response plan
Safety accountabilities of managers	SMS documentation
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	Risk assessment and mitigation
Hazard identification processes - proactive	
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 conducting internal safety investigations, effectively managing change across the aviation activities conducted and driving continuous improvement of the SMS.	
Prompts	
System performance monitoring (SPIs)	Management of change
Assurance	Continuous improvement of SMS
Internal safety investigation	Internal safety audit
Element: Safety promotion	
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.	
Prompts	
Training and education	Safety communication

Table 7. Dangerous Goods Elements

System: Dangerous Goods (DG)	
Element: DG processes and procedures	
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.	
Prompts	
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
Element: DG records	
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.	
Prompts	
DG transport documentation	Receipt and dispatch records
Element: DG training records	
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.	
Prompts	
Procedures and legislative requirements	Review DG training records
List of personnel authorised to ship DG	Management of training recurrency
Training records	

5 Surveillance currency guide: AMO

Table 8. Surveillance currency guide

Surveillance level	Type	Elements
Level 1	Systems audit	Systems, 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 Oversight Plan (NOP). Refer to section regarding surveillance intervals for more information.

6 Technical Arrangement on Aviation Maintenance Between CASA and JCAB (TA-M)

Refer AC 145-06

On 25 March 2022, CASA entered into a Technical Arrangement on Aviation Maintenance with JCAB (the TA-M). Currently, the TA-M is limited to maintenance of aeronautical products.

The TA-M allows maintenance organisations, recognised under the provisions of the TA-M, to perform maintenance on Australian or Japanese aeronautical products in accordance with the maintenance regulations of the territory where the organisation performing the work is located.

Notification

Each Authority will notify the other Authority of any instance of unsatisfactory compliance with any regulations or any matters set forth in this Technical Arrangement that affects the ability of an approved organisation to comply with the matters of this Technical Arrangement.

The Overseeing authority will promptly notify the other Authority of any investigations or enforcement action, including revocation or suspension taken against a maintenance organisation that it has approved to participate in this Technical Arrangement.

> Note:
>
> Ensure LIRA is consulted prior to notifying JCAB of any matters set forth in the TA-M.

7 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
- past surveillance reports and 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.

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

Note: For advice on where and how to access required information refer to CSM chapter on information capture and access.