

# CASA Surveillance Manual Annex 21 - Part 141 and Part 142 Flight Training Activities



#### **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.

#### © Civil Aviation Safety Authority

All material presented in this Guidance document is provided under a Creative Commons Attribution 4.0 International licence, with the exception of the Commonwealth Coat of Arms (the terms of use for the Coat of Arms are available from the <a href="It">It's an Honour website</a>). The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 4.0 license.



#### Attribution

Material obtained from this document is to be attributed to CASA as:

© Civil Aviation Safety Authority 2023.

This document becomes an uncontrolled document when printed. Refer to the CASA <u>website</u> for the current version.

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		4
Revision history		5
1	Overview	6
2	Surveillance Intervals	7
3	Multi-year surveillance	8
4	Systems and elements	9
5	Surveillance currency guide	21
6	Information sources	22

### 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.

Note: Authorisation Holders that conduct something other than training only should be guided by Annex 3 – Flight Operations.

# **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
1.3	July 2024	Throughout	Removed Health checks
		2	Added Surveillance intervals
		3	Added multi-year surveillance guidance
		4	Added Safety Policy table (Part 141)
			Added Safety Management table (Part 142)
1.2	April 2023	Table 4: Operations; Fuel Policy	Prompts moved to Training Infrastructure:     Notification to flight crew     Record retention Computer software/hardware reliability and validity
		Table 5: Safety Policy	Removed all elements aside from Safety Policy and added (Part 141)
		Table 5: Cargo and Passengers	Table removed. Aircraft Load Control element moved to Table 6: Training
1.1	October 2022		Added of Aircraft - Airworthiness Assurance Added of Training – FSTD Removed of Training Management - FSTD
1.0	December 2021	Initial Issue	

### 1 Overview

This annex provides instructions for conducting surveillance of Part 141 Certificate Operators and Part 142 Certificate and AOC Operators.

CASR Part 141 (recreational, private, and commercial pilot flying training other than some integrated courses)

CASR Part 142 Flight Training (For Part 142 activities that involve operation of aircraft and for Part 142 activities conducted in flight simulation training devices)

This annex contains information relating to the following:

- Surveillance intervals
- Multi-year surveillance
- Systems and elements
- Surveillance currency guide
- 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
Flying T	raining					
FO-H	AOC Part 142 - Tier 1	In-aircraft training: - Contracted recurrent training - Contracted checking - Multi-crew training	5	2	30	All
FO-I	AOC Part 142 - Tier 2	In-aircraft integrated training	5	2	30	Extended
FO-J	Part 142 - Tier 3	FSTD training only	5	1	60	Core
FO-K	Part 141		5	2	30	Extended

## 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;

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

<u>Extended</u> = 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.

<u>All Applicable</u> = 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

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 a Part 141 consists of 5 systems and 19 elements.

The CASA description of a Part 142 consists of 5 systems and 22 elements.

Table 3. Systems and elements

Systems	Elements
Aircraft (Turbine Powered Aircraft only) - FSTDs	Line Servicing
	Airworthiness Assurance
	Airworthiness Control
	Maintenance System
Operational Personnel	Operational Standards
	Personnel Standards
	Fatigue Management (Flight Crew) – CAO 48.1 Appendices 1-6
	Fatigue Risk Management System (FRMS) – CAO48.1 Appendix 7
Operations	Operational Support Systems
	Authorised Activities
	Fuel Policy
Safety Policy (Part 141 only)	Safety Policy
Safety Management (Part 142 in aircraft training activities only)	Safety Assurance
	Safety Promotion
	Safety Risk Management
	Safety Policy and Objectives
Training	Training Management

Training Infrastructure
Flight Testing
Theory Examination
Qualifications and authorisations (instructor, examiner, and support staff)
Flight Simulator Training Devices (FSTD)
Quality System

#### Table 4. Aircraft Elements

#### System: Aircraft (Turbine Powered Aircraft only) FSTDs

#### **Element: Line Servicing**

This element contains the systems and processes for ensuring the appropriate activities are conducted to ensure the aircraft is serviced for flight.

#### **Prompts**

Line maintenance	Replenishing	
Cleaning	Authorised maintenance support equipment	
Fuelling	Towing	

#### **Element: Airworthiness Assurance**

This element contains the systems and processes for ensuring the aircraft is Airworthy and fit for service. This is accomplished primarily through the authorisation holder's internal audit processes and closes the loop on the maintenance system.

#### **Prompts**

Audit	Aircraft
Maintenance	Locations
Aircraft documentation	

#### **Element: Airworthiness Control**

This element contains the systems and processes for achieving the "how" maintenance activities are conducted and "who" completes the maintenance activities.

#### **Prompts**

System of release to service	Contractual arrangements
Defect information	Operational equipment
Airworthiness directives	MEL/CDL deferred maintenance
Maintenance control manual (Class A aircraft)	Aircraft cross hire agreement

#### **Element: Maintenance System**

This element contains the systems and processes for identifying "what" maintenance activities are required to be done as well as "when" the maintenance activities are to be completed.

Aircraft specialised operations	Safety equipment
Reliability program	Maintenance release/Technical log
System of Maintenance (SOM) - Approved Maintenance Program (AMP)	

#### **Table 5.** Operational Personnel

#### **System: Operational Personnel**

#### **Element: Operational Standards**

Operational Standards are a vital element of the system required to maintain safe operations through the establishment of an appropriate set of systems (includes an appropriate organisational structure) to accommodate induction, check to line, upgrade training (where applicable).

#### **Prompts**

CEO	Quality assurance personnel
Head of Operations	Ground crew
Quality manager	Operational support and admin staff
Maintenance controller	Flight examiners
Flight instructors	Ground instructors

#### **Element: Personnel standards**

Personnel Standards are a vital element of the system required to maintain safe operations through the establishment of an appropriate set of systems (where applicable) and a system for dealing with unacceptable performance. The standards of personnel, including third-party providers is required to be documented detailing qualifications, training and any other requirements.

#### **Prompts**

Induction training procedures	Remedial training procedures
Standardisation and proficiency procedures	Quality assurance personnel
Personnel licensing requirements	Key personnel responsibilities

#### Element: Fatigue Management (Flight Crew) - CAO 48.1 Appendices 1-6

The Fatigue Management element is designed to audit compliance with CAO 48.1 Appendices 1 to 6 and minor variation approvals. Safe operations rely on proactive management of fatigue risks and hazards.

#### **Prompts**

Roster production	Fatigue management
Records and Reports	Fatigue training
Fatigue hazard and identification and mitigation processes	Enhanced obligations (Appendices 2-6) (Part 141 only)
FCM fatigue monitoring	Minor Variation conditions
Sleep opportunity assurance	Appendix selection
Sustenance	

Element: Fatigue Risk Management System (FRMS) - CAO48.1 Appendix 7

An FRMS approval allows an operator to establish bespoke fatigue limits in excess of those allowable under another appendix to CAO 48.1. fatigue hazard identification, mitigation, monitoring. assurance and promotion procedures all form the basis of an effective risk management system for safe operations.

Prompts	
Change management procedures	Practical operating procedures
FCM fatigue monitoring	Sustenance
Data acquisition and analysis	Safety Assurance procedures
Use of Biomathematical Model	Safety promotion procedures
Fatigue Training	Records and Reports
Hazard identification, risk assessment and mitigation procedures	

#### Table 6. Operations

#### **System: Operations**

#### **Element: Operational Support Systems**

This element contains the authorisation holder's systems and processes that support the conduct of Part 141 and Part 142 Operations. The authorisation holder system to provide crews/students with the published data and procedures necessary to achieve compliance with performance requirements.

#### **Prompts**

Provision of Performance data	Flight planning and preparation
Training aerodromes and associated training areas	Charts (training area, low flying area, aerobatic area)
Operational library	Records management
Training aids	Training programming
Record storage and archive	Scheduling practices

#### **Element: Authorised Activities**

The AOC Operations element addresses the systems that ensure the authorisation holder contains its operations to those authorised by legislation.

#### **Prompts**

Authorised scope of activities	Certificate conditions
riali londed deope of delivities	Octanioate containons

#### **Element: Fuel Policy**

This element addresses the current or proposed policy the authorisation holder has in place to comply with the requirements of CASR 91.455, 138.285, 135.355, 133.190 and 121.235 and associated amendments. This is achieved through a review of the relevant sections of the authorisation holder's Operations Manual or separately submitted fuel policy.

Aircraft specific fuel data	In-flight fuel management
Fuel planning requirements	Variable fuel requirements
Fuel reserves	Fuel policy risk assessment
Supplementary fuel	

### Table 7. Safety Policy (Part 141 only)

System: Safety Policy (Part 141 only)		
Element: Safety Policy		
This element contains the systems and processes that ensure effective governance to support the safety management that is in place, including processes for the review and update of the authorisation holder's management and commitment.		
Prompts		
Description of operators Safety policy	Safety objectives/ Safety performance indicators	
Continuous improvement process	Safety policy training	

#### Table 8. Safety management

#### **System: Safety management**

#### Element: Safety policy and objectives

This element contains the systems and processes that ensure effective governance to support the safety management that is in place, including processes for the review and update of the authorisation holder's management and commitment.

#### **Prompts**

Safety policy	Appointment of key personnel
Just culture	Third party relationships and interactions
Safety objectives / Safety performance indicators	Emergency response plan
Safety accountabilities / responsibilities of managers	SMS documentation
Safety governance	

#### Element: Safety risk management

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

#### **Prompts**

Hazard identification process - reactive	Risk assessment and mitigation
Hazard identification process - proactive	Safety investigation

#### **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.

Safety performance monitoring and measuring	Safety performance indicators
Internal audit programme	Management of change
Internal audit programme	Management of change
Data analysis programs (including flight data analysis, FOQA, FDAP, FDM, MOQA, reliability programs, etc	Continuous improvement

#### System: Safety management continued

#### **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	
SMS training and education programme	Safety communication processes
Safety promotion	HF / NTS training
Key personnel familiarisation training	Safety-critical / Safety specialist specific training
Recurrent training	Training records

#### Table 9. Training

System: Training		
Element: Training Management		
This element contains the authorisation holder's syst	ems and processes for the management of training.	
Prompts		
Training prerequisites	Training syllabus	
Training plan	Training delivery	
Training assessment	Training system performance	
Remedial training	Change management process	
Training records management	Internal audit	
Continuous improvement	Temporary locations	
Flight school students	Training flights authorisation	
Recommendation and/or issue of authorisations (internally)		
Element: Training Infrastructure		
This element describes the suitability of the authorisation holder's infrastructure to support the delivery of the Part 141 and 142 training operations.		
Prompts		
Aircraft suitability for purpose	Facilities and equipment	
Flight simulation training devices	Briefing rooms	
Classrooms	Exam facilities and security	
Temporary locations	Computer software/hardware reliability and validity (For example load control software)	

#### **System: Training continued**

#### **Element: Flight Testing**

This element contains the authorisation holder's systems and processes for the conduct of flight tests and assessments.

#### **Prompts**

Recommendations and prerequisites	Competency
Management of candidate's assessments	Flight test notification
Appropriate assessment devices	Construct of the assessment exercise
Exam bank management	Aircraft configuration
Trim sheet production	Cargo and baggage restraint
Load distribution	

#### **Element: Theory Examination**

This element describes the systems that make up the control of all systems associated with the conduct of examinations of students under the control of the authorisation holder. In some circumstances this may be extended to staff who are required to undertake periodic examinations. The documented system should account, but is not limited to, the control of personnel supervising examinations and undertaking examinations, conduct of practical tests and assessments and control and issue of certificates. The exam structure should ensure that the relevant syllabus items are covered, that the marking key is appropriate, with multiple choice answers, that the distractors are reasonably realistic; that where a computer-generated question paper is used that there are processes to prevent the same questions recurring.

-	
Organisation of examinations	Examination facilities
Exam structure	Coverage of syllabus, marking key
Conduct	Basic/Type practical assessments
Inappropriate practices	Alternate locations
Examination assessment, including processes to manage examination failure	Measures to detect/prevent cheating or inappropriate collaboration
Issue of certificates	Compliance with regulatory standards

#### **System: Training continued**

#### Element: Qualifications and authorisations (instructor, examiner and support staff)

This alament contains the authorisation holder's systems and processes to manage the instructional and

This element contains the authorisation holder's systems and processes to manage the instructional and examining standards (includes HF / NTS, key personnel training etc.).			
Prompts			
Personnel training records			
Instructor standardisation and proficiency			
HF/NTS			
Element: Flight Simulator Testing Devices (FSTD)			
This element contains the authorisation holder's systems and processes for FSTDs			
Prompts			
Certification			
Suitability			

#### **Element: Quality System**

This element contains the authorisation holder's systems and processes for Quality Systems

Quality System	Quality Policy	
Management Responsibility	Document Control	
Resource Allocation	Quality Procedures	
Internal Audit	Continuous Improvement	

# 5 Surveillance currency guide

Table 10. Surveillance currency guide

Surveillance level	Туре	Elements
Level 1	Systems audit	Systems, risks and compliance
	Post-authorisation review	Entry control elements
Level 2	Operational check	E.g., Flight Deck observation, Ramp check

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

## 6 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.

A large portion 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.