



SUMMARY OF PROPOSED CHANGE



Proposed Part 43 legislation - Maintenance of aircraft in private and aerial work operations

Civil Aviation Safety Amendment (Part 43) Regulations 2021
Consequential, application, transitional and savings regulations
Part 43 Manual of Standards

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Introduction

This summary of proposed change (SPC) is the final consultation stage in the development of Part 43 of the *Civil Aviation Safety Regulations 1998* (CASR) —Maintenance of aircraft.

In this SPC we set out draft Part 43 of CASR, draft Manual of Standards (MOS) and provide links to Part 43 information sheets, Part 43 Plain English Guide (PEG) and Part 43 Guide for IAs.

We also provide links to previous consultation and decision documents related to this project.

Contents

Introduction	2
Reference material	5
Acronyms	5
References	5
Purpose and scope of this document	8
Key concepts for Part 43 of CASR	9
Applicability of Part 43	9
Maintenance organisation approval not required for most maintenance	9
Expanded scope for independent maintenance provision by LAMEs under Part 43 of CASR	9
Task based demonstration of competency	9
Inspection Authorisations	10
Return to service after maintenance	10
Inspections of aircraft and aeronautical products	10
Return to service after inspection	11
Previous consultations	12
Impact on industry	13
Maintenance organisation approval savings	13
Inspection Authorisation	13
Maintenance tasks	13
Compliance with service bulletins	13
Simplified record keeping	14
Safety risk analysis	15
CAR 30 – Maintenance of Part 43 aircraft by CAR 30 organisations	15
MRs that are in force at commencement Transitional arrangements	15
Maintenance authority holders	15
Inspection Authorisations	15
Consequential amendments	16
Part 21 of CASR- Imported used aircraft	16
Part 145 of CASR - Maintenance of Part 43 aircraft by AMOs	16
Systems of maintenance and maintenance schedules	16
Delegations	16

CONSULTATION DRAFT FOR PROPOSED PART 43 LEGISLATION - MAINTENANCE OF AIRCRAFT
IN PRIVATE AND AERIAL WORK OPERATIONS

Legislative Instrument amendments	16
Regulation impact statement	17
Closing date for comment	18

Reference material

Acronyms

The acronyms and abbreviations used in this document are listed in the table below.

Acronym	Description
AC	advisory circular
AMTC	Aircraft Maintenance Technician
CAR	<i>Civil Aviation Regulations 1988</i>
CASA	Civil Aviation Safety Authority
CASR	<i>Civil Aviation Safety Regulations 1998</i>
IA	inspection authorisation
MA	maintenance authorisation
MOS	Manual of Standards
MR	maintenance release
PEG	Plain English Guide
RO	registered operator

References

Legislation

Legislation is available on the Federal Register of Legislation website <https://www.legislation.gov.au/>

US Federal Aviation Regulations are available at the FAA website [FAA Regulations](#)

Document	Title
CAR Part 4A	Maintenance
FAR Part 43	Maintenance, preventive maintenance, rebuilding, and alteration
FAR Part 65	Certification; Airmen other than flight crew members
FAR Part 91	General operating and flight rules

Advisory material

CASA's advisory materials are available at <https://www.casa.gov.au/publications-and-resources/guidance-materials>

Document	Title
Draft AC 43-01	Registered operators - responsibilities under part 43
Draft AC 43-02	Inspection of aircraft - Requirements
Draft AC 43-03	Maintenance Data – What is mandatory and when

CONSULTATION DRAFT FOR PROPOSED PART 43 LEGISLATION - MAINTENANCE OF AIRCRAFT
IN PRIVATE AND AERIAL WORK OPERATIONS

Document	Title
Draft AC 43-04	Acceptable maintenance data
Draft AC 43-05	Acceptable methods techniques and practices
Draft AC 43-06	Inspection Authorisations - Issue, privileges and limitations
Draft AC 43-07	Aircraft Maintenance Technicians – Maintenance of aircraft and aeronautical products
Draft AC 43-08	Fabrication in the course of maintenance
Draft AC 43-09	Maintenance Records
Draft AC 43-10	Maintenance certifications and release to service
Draft AC 43-11	Preventative (Pilot) Maintenance – limits and responsibilities
Draft AC 43-14	Piston Engine Overhauls
Draft AC 43-16	Maintenance of amateur-built aircraft
Draft AC 43-17	Maintenance of light sport aircraft
Draft AC 43-18	Maintenance of limited category aircraft
Draft AC 43-19	B1 LAME – Privileges and responsibilities
Draft AC 43-20	B2 LAME – Privileges and responsibilities
IA guide	Guide for holders of Inspection Authorisations
Information sheet	Working as a B1 LAME under Part 43
Information sheet	Working as a B2 LAME under Part 43
Information sheet	Task supervision-based expansion of licence scope
Information sheet	Inspection Authorisations
Information sheet	Aircraft maintenance technicians
Information sheet	Aircraft inspections
Information sheet	First annual inspection
Information sheet	Manufacturers service bulletins
Information sheet	Piston engine overhaul
Information sheet	Part 43 and approved maintenance organisations
Information sheet	Amateur-built aircraft
Information sheet	Maintenance of amateur-built aircraft and light sport aircraft
Information sheet	Buying and importing a foreign aircraft for operation under Part 43
Information sheet	Requirements for maintaining records
Information sheet	Case study – Transitioning to Part 43 – a decision made easy.
PEG	Plain English Guide

Forms

CASA's forms are available at <http://www.casa.gov.au/forms>

Form number	Title
43-01	Application – Inspection Authorisation – Initial issue or renewal
43-02	Application for initial issue, amendment and renewal of Aircraft Maintenance Technician Certificate (AMTC) 1
43-03	Application – Approval to provide Aircraft Maintenance Technician Training
43-04	Application – Approved inspection program- Initial or variation

Purpose and scope of this document

This SPC provides drafts of Part 43 of CASR, the Part 43 manual of standards (MOS) and supporting guidance material.

The purpose of this SPC is to provide you an opportunity to compare the draft legislation against the agreed policy outcomes as presented in the Policy Decision Summary in December 2020.

The draft regulation provides for CASA to create a Part 43 MOS and contains a general provision that a failure by a person to comply with a requirement in the MOS is an offence. The regulation also establishes some foundational regulations and sets out offence provisions not covered by the general offence provision.

The MOS contains the FAR provisions endorsed by aircraft operators and maintainers as the outcomes of a survey conducted in August 2018 which are mostly unchanged in effect. Some changes were made to accommodate matters brought to our attention during further consultations.

The changes relaxed FAR provisions which were considered unnecessarily burdensome for the private and aerial work sector and incorporated some Civil Aviation Regulations (CAR) provisions which were more flexible than the FARs, or had sufficient safety value to merit retention, such as the independent inspection of flight control systems after maintenance.

Key concepts for Part 43 of CASR

Applicability of Part 43

The proposed new rules will apply to GA maintenance. In this context GA maintenance covers all flying activity carried out by VH registered aircraft other than air transport operations (previously regular public transport and charter). This includes flying training, aerial work, aerial application, mustering, firefighting and emergency service operations, search and rescue, aerial surveying and photography, towing, parachuting, limited category operations, adventure flights, experimental operations and private flying. Part 43 does not cover aircraft that are subject to CASR Part 42, Part 103 or Part 101.

Maintenance organisation approval not required for most maintenance

With some exceptions for more complex maintenance, maintenance services for Part 43 aircraft will be provided by licenced aircraft maintenance engineers (LAME) and aircraft maintenance technician certificate (AMTC) holders—their licence or certificate is their approval to provide maintenance within the provisions of the MOS and the scope of a licence or an AMTC.

Expanded scope for independent maintenance provision by LAMEs under Part 43 of CASR

Part 43 of CASR will allow LAMEs to provide, without holding a maintenance organisation approval, most maintenance services under the privileges of their licence and additional privileges as set out in the Part 43 MOS.

A B1 LAME may carry out maintenance on a Part 43 aircraft regardless of subcategory of licence held and will not be required to hold type ratings to maintain type rated aircraft subject to demonstration of competency requirements.

A B2 LAME will not be required to hold type ratings and may carry out maintenance on any electrical or avionics system subject to the demonstration of competency requirements.

In the absence of maintenance organisation approvals, expanded licence privileges will be subject to the following conditions that will provide for an appropriate level of safety assurance:

- task based demonstration of competency
- requirement for a LAME to hold an inspection authorisation (IA) for certain maintenance functions
- aircraft maintenance technician certificates (AMTC) for certain specialised maintenance functions.

Task based demonstration of competency

The Part 43 MOS will specify that a LAME may only carry out maintenance on an aircraft or aeronautical product and approve it for return to service if:

- they have access to and understand the manufacturer's instructions for carrying out the maintenance, and at least one of the following:

- the maintenance is a basic privilege of their licence,
or they
- have been trained in the particular maintenance
or
- have previously satisfactorily carried it out under the supervision of a person who is authorised to perform the maintenance and approve the aircraft, or aeronautical product, for return to service.

Inspection Authorisations

A B1 LAME may apply for a mechanical IA and a B2 LAME may apply for an avionics IA if they meet experience and training requirements set out in the MOS. Only an IA holder may approve an aircraft for return to service after an annual inspection, or an aircraft or aeronautical product for return to service after a major repair or major modification.

Return to service after maintenance

A person certifying for completion of maintenance approves the aircraft or aeronautical product for return to service.

The certification for completion of maintenance is made in a maintenance record for the aircraft or aeronautical product and is the approval for return to service of the aircraft or aeronautical product. This is described in the Part 43 MOS.

The primary difference between Part 43 of CASR and CAR or Part 42 of CASR is that all maintenance information and certifications are contained in the aircraft maintenance records. No maintenance release form, certificate of release to service, or flight tech log is required to be carried on a Part 43 aircraft. If an item of equipment is permitted by the Part 43 MOS to be inoperative, the item of equipment, instrument or cockpit control must be tagged as inoperative in a manner that is clearly visible to a pilot. This is provided for in the Part 43 MOS.

Inspections of aircraft and aeronautical products

Part 43 of CASR will differ from CAR and Part 42 of CASR in that Part 43 of CASR will not prescribe maintenance programmes or maintenance schedules. Part 43 of CASR will instead require safety to be maintained through regular inspections which comprise a visual inspection of an aircraft, functional checks, and a review of the aircraft for compliance with its type certification basis. Generally, inspections will be conducted in accordance with a written inspection schedule developed by the registered operator (RO) and is based on Schedule 1 of the draft MOS, or a schedule approved by CASA, or the aircraft manufacturer's recommended inspection schedule (see section 4.17 of the draft MOS). Some aircraft must be inspected in accordance with an approved inspection program (see section 3.19 of the draft MOS).

Return to service after inspection

Upon completion of a scheduled inspection, the person certifying for completion of the inspection makes a maintenance record entry stating that the aircraft is either airworthy and approved for return to service, or not airworthy and not approved for return to service.

If an aircraft is not approved for return to service, the person who decides this must give the RO a signed and dated list of defects which the RO must have rectified before returning the aircraft to service. This is described in the Part 43 MOS.

In the case of an aircraft being approved for return to service with deferrable defects, the person certifying for completion of the inspection must provide the RO with a signed and dated list of the defects and fix “inoperable” placards to inoperative instruments or controls so that the pilot can easily determine the serviceability status of the aircraft instruments and its systems.

Previous consultations

In August 2018, we conducted an initial public consultation seeking the views of the aviation community on the current challenges associated with maintenance of aircraft involved in private and aerial work operations and to identify opportunities to improve CASAs regulatory system.

Industry respondents expressed overwhelming support for a regulatory system based on the FARs of the United States.

In December 2018/January 2019, we sought feedback on a policy proposal based on the FARs. The consultation document *CD1812ss — Part 43 of the Civil Aviation Safety Regulations – Maintenance of Aircraft* set out in detail the policy outcomes that were proposed to be put into place.

In December 2020 we published:

- a detailed Policy Decision Summary (PDS) which sets out the detailed policy decisions that flowed out of the consultative process
- a Summary of Consultation (SOC)

The PDS drove the draft Part 43 MOS which sets out the detailed technical requirements relating to registered operators and maintainers of Part 43 aircraft.

Impact on industry

Part 43 of CASR, in keeping with the FARs, allows LAMEs to provide maintenance services without holding a CASA organisational approval as the licence is their approval to carry out maintenance.

Maintenance organisation approval savings

The savings from avoiding the need to obtain an initial maintenance organisation approval are likely to be significant, because the business would avoid the need to prepare a manual and incur the time and cost of a CASA approval process.

There will also be significant cost savings on an ongoing basis from avoiding the need to have variations to the organisation's activities approved by CASA and being subject to CASA documentation and procedures audits.

Inspection Authorisation

While the need for a maintenance organisation approval is significantly reduced under Part 43 of CASR, for a licensed engineer to have the authority to undertake an annual inspection, the engineer must hold an inspection authorisation. The cost of the IA examination is likely to be in the range of \$200 to \$300.

Maintenance tasks

Another benefit of introducing Part 43 of CASR will be the clarification of what maintenance is required and the removal of non-safety related maintenance tasks from mandatory requirements.

Clarification

Under the current regulations, there is a lack of clarity about what defects are required to be rectified at a periodic inspection before the aircraft can be issued with a maintenance release. Under Part 43 of CASR it will be made clear that the required maintenance will be the rectification of any defect, or damage that makes the aircraft unsafe, and rectification of any inoperative equipment that is required by the aircraft certification basis and any survival or role equipment that is required for a flight.

While there will be no new continuing airworthiness requirements for a periodic inspection, some industry stakeholders may perceive the requirement to check that the aircraft meets the Part 21 type certificate as a new requirement. However, this requirement will not have a significant impact because of the removal of current requirements for aircraft to have maintenance schedules or systems of maintenance.

Compliance with service bulletins

Aircraft manufacturers issue documents (e.g., service bulletins) from time to time advising of maintenance actions that can be carried out. The reasons behind these service bulletins range widely. In some cases, service bulletins address a known safety issue, but more often these

documents cover a range of minor subjects such as reliability enhancements and alternative parts. The current regulations are unclear whether service bulletins must be carried out in some situations, resulting in inconsistent application over time. Part 43 of CASR will make it clear that a service bulletin is not automatically required unless it is specified in an airworthiness directive or is required by an aircraft's adopted inspection schedule.

Simplified record keeping

There will be additional savings from a simplified record keeping system. The maintenance organisation under the current regulations must now retain maintenance work sheets for two years.

Under Part 43 of CASR this record keeping requirement will be removed and all required maintenance information will be held in the aircraft's records system.

Safety risk analysis

In 2018, CASA conducted a detailed technical review of the US-FARs. CASA considers the US-FARs to be a well-established set of regulations that are readily accepted by the FAA and US aviation industry. The FAA requirements are clear and scalable across a wide range of aircraft and operations, promote pathways for industry growth, and obtain good safety outcomes that are historically slightly better than those in Australia.

Part 43 of CASR will commence within 2 months of the legislation being made and this will allow early uptake by registered operators (RO) and maintainers who requested the earliest possible start date.

A transition period of 12 months will permit other ROs and maintainers to make an orderly transition to Part 43 of CASR or move over to Parts 42 and 145 of CASR. CAR 30 organisations will have 36 months to transition.

CAR 30 – Maintenance of Part 43 aircraft by CAR 30 organisations

Maintenance organisations approved under CAR 30 to carry out maintenance of aircraft, will be permitted to carry out Part 43 maintenance in accordance with their procedures manuals and issue maintenance releases (MR) for a period of 36 months after commencement.

MRs that are in force at commencement Transitional arrangements

Maintenance releases in force at commencement of Part 43 or issued during the transition period will remain valid for the validity period of the MR.

Maintenance authority holders

Holders of maintenance authorisations (MA) issued under regulation 33B, 33C or subregulation 42ZC (6) of CAR will be issued with an AMTC without loss of privileges.

MA holders will be permitted to continue exercising the privileges of their MA For 12 months after commencement

Inspection Authorisations

CASA will make the IA training course available on the [CASA website](#) from the date of making of the regulation and MOS. LAMEs who complete the course ahead of implementation will be eligible to apply on the day of commencement.

Consequential amendments

Part 21 of CASR- Imported used aircraft

Part 43 of CASR does not require design approval for minor modifications or repairs. However, under Part 21 of CASR, a standard certificate of airworthiness may only be issued to an aircraft if it can be shown that the aircraft conforms to its type design and has had any modifications or repairs carried out in accordance with a supplemental type certificate or an approved modification/repair design.

Requirements in regulation 21.183 of CASR will be amended to permit the importation and certification of aircraft which have had minor modifications or repairs carried out without the need for Part 21 assessment and approval, for private and aerial work operations only.

Part 145 of CASR - Maintenance of Part 43 aircraft by AMOs

Part 145 approved maintenance organisations (AMO) will be authorised under Part 43 of CASR to carry out and certify for maintenance and approve Part 43 aircraft for return to service.

Systems of maintenance and maintenance schedules

Part 202 of CASR will include a provision that will permit an aircraft that has a maintenance schedule or system of maintenance (SOM) that has been approved under regulation 42M of CAR to continue to be inspected in accordance with the schedule or SOM as if it were approved under the Part 43 MOS.

Delegations

CASA will update the delegations instrument to accommodate issue of Inspection Authorisations (IA) and Aircraft Maintenance Technician Certificates (AMTC).

Legislative Instrument amendments

The Civil Aviation Regulations 1988 (CAR) were a complex blend of regulations and legislative instruments that covered perceived safety deficiencies within the regulations, and in some cases provided relief from some provisions.

Part 43 of CASR and its MOS is a comprehensive 'one-stop' regulation that will remove the complexities and deficiencies which previously necessitated the various compensatory instruments.

Civil Aviation Orders

Maintenance Civil Aviation Orders will not apply to Part 43 aircraft. Orders such as CAO 95.56, CAO 100.5, CAO 104.0 and CAO 100.7 set out matters that are either included in the Part 43 MOS or are not applicable to Part 43 maintenance and they will be disapplied by CASA.

Airworthiness Directives

The following general ADs are to be disappplied to Part 43 aircraft as they mandate inspections that are covered by Part 43 or they mandate maintenance actions or periods that conflict with Part 43 policies:

- AD/GENERAL/29 - Wooden Aircraft-Airframe structural inspection
- AD/GENERAL/87 - Primary flight control cable terminals -detailed visual inspections
- AD/ENG/4 - Piston Engine Continuing Airworthiness Requirements
- AD/ENG/5 - Turbine Engine Continuing Airworthiness Requirements
- AD/ENG/7 - Replacement of Life Limited Turbine Engine Components
- AD/PROP/1 - Propellers - Overhaul
- AD/PROP/2 - Feathering Propellers - Functional Check

In disapplying the ADs, any matters considered essential to safety have been incorporated either in the regulation or in the MOS.

Regulation impact statement

CASA is preparing a Regulation Impact Statement, which will include consultation feedback and be assessed by the Office of Best Practice Regulation.

Closing date for comment

CASA will consider all comments received as part of this consultation process and incorporate changes as appropriate. Comments on the draft Part 43 of CASR – Maintenance of aircraft should be submitted through the online response form by close of business 19 June 2022.