Australian Government
Civil Aviation Safety Authority

ADVISORY CIRCULAR
AC 43-01 v1.0

Registered operator - responsibilities under Part 43

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Advisory circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.

Advisory circulars should always be read in conjunction with the relevant regulations.

Audience

This advisory circular (AC) applies to:

- registered operators
- licensed aircraft maintenance engineers (LAMEs)
- aircraft maintenance technicians
- CAR 30 organisations
- Part 145 approved maintenance organisations.

Purpose

This AC provides the registered operator of an aircraft, to which Part 43 of CASR applies, guidance material relating to their responsibilities for the airworthiness and record keeping for their aircraft. This AC also provides guidance on some record keeping systems the registered operator may choose to use for their aircraft.

For further information

For further information, contact CASA's Airworthiness and Engineering Branch (telephone 131 757).

Status

This version of the AC is approved by the Branch Manager, Airworthiness and Engineering.

Version	Date	Details
v1.0		Initial AC.

Unless specified otherwise, all subregulations, regulations, Divisions, Subparts and Parts referenced in this AC are references to the *Civil Aviation Safety Regulations 1998 (CASR)*.

Contents

1 Reference material

1.1 Acronyms

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

Acronym	Description
AC	advisory circular
AD	airworthiness directive
AMTC	aircraft maintenance technician certificate
AWL	airworthiness limitation
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
ICA	instructions for continuing airworthiness (issued by manufacturer or designer)
NAA	national airworthiness authority (for a country other than Australia)
RO	registered operator

1.2 Definitions

Terms that have specific meaning within this AC are defined in the table below. Where definitions from the civil aviation legislation have been reproduced for ease of reference, these are identified by 'grey shading'. Should there be a discrepancy between a definition given in this AC and the civil aviation legislation, the definition in the legislation prevails.

Term	Definition
aerial work operations	Aerial work operations include flying training.
airworthiness directive	airworthiness directive means: • an Australian airworthiness directive; or • a foreign State of Design airworthiness directive issued on or after 1 October 2009; or • for a model of aircraft that is first registered in Australia on or after 1 October 2009—a foreign State of Design airworthiness directive issued before 1 October 2009 for that model or for an aeronautical product that is part of, or used in, that model.
Australian aircraft	Australian aircraft means aircraft registered in Australia; and aircraft in Australian territory, other than foreign registered aircraft and state aircraft.
certificate	Aircraft maintenance technician certificate
major defect	Major defect means: • in relation to an aeronautical product that is not fitted to an aircraft—a defect of such a kind that the aeronautical product, if fitted to an aircraft, may affect the safety of the aircraft or cause the aircraft to become a

Term	Definition
	danger to persons or property; and • in relation to an aircraft—a defect of such a kind that it may affect the safety of the aircraft or cause the aircraft to become a danger to persons or property.

1.3 References

Legislation

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

Document	Title
Part 43 of CASR	Maintenance of Aircraft
Part 43 MOS	Maintenance of Aircraft

Advisory material

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

Document	Title
AC43-02	Inspection of aircraft - requirements
AC 43-09	Maintenance records
AC 43-11	Preventive (pilot) maintenance -limits and responsibilities
AC 11-3(1)	Electronically formatted certifications, records and management systems

2 General

2.1 Registered operator responsibilities

The registered operator (RO) is responsible for ensuring that an Australian aircraft, operated in private or aerial work operations, is not made available for a flight unless the aircraft is airworthy, and all required inspections and rectifications have been properly carried out and approved for return to service.

The RO of an aerial work aircraft is also responsible for approving pilots to carry out preventive maintenance on their aircraft.[1]

2.1.1 Record Keeping

The RO is required to keep a system of records that includes:

- for the aircraft, a record of total flight time is kept up to date
- for each airframe, engine and adjustable propeller, a maintenance record is kept
- records of all maintenance carried out
- certifications for completion of all maintenance
- details of inspection requirements and records of completion of inspections.

[1] Refer to AC 43-11 for more information on pilots performing preventive maintenance.

3 Ensuring Airworthiness

3.1 Inspections

The RO is responsible for nominating an inspection schedule or programme suitable for their aircraft. The RO records details of the chosen inspection schedule or program in the aircraft records. The inspection schedule or programme will depend on the type of aircraft operated[2].

There are five types of inspections.

3.1.1 Annual inspection

The annual inspection is based on schedule 1 in the Part 43 MOS, and is available to:

- small piston engine aeroplane
- piston engine helicopter with the addition of the manufacturer's inspections for helicopter specific controls, rotors and drive systems
- small single turbine engined aircraft provided the engine manufacturer's engine inspection schedule or checklist is used
- turbine powered helicopters with the addition of the manufacturer's inspections for helicopter specific controls, rotors and rotor drive systems and the engine manufacturer's engine inspection schedule or checklist is used.

3.1.2 Progressive inspection

This inspection may be the annual inspection broken up into phases or sections and carried out over a 12-month period, or the manufacturer's progressive inspection schedule.

3.1.3 100 Hourly inspection

The RO of a small aircraft involved in aerial work in which a person other than a crew member is carried for payment, including flight training must have the aircraft inspected each 100 hours as well as annually.

3.1.4 Manufacturer's inspection schedule

The RO of small aircraft may choose to use the manufacturer's inspection schedule.

3.2 Inspection Programme

The RO of large aeroplanes and aeroplanes with multiple turbine engines must have the aircraft inspected in accordance with an inspection programme which is supervised by a suitable person nominated by the RO. The inspection programme may be:

- the aircraft manufacture's current inspection programme
- an inspection programme approved by CASA

[2] Refer to AC 43-2 for further information on inspections.

- a continuous airworthiness inspection program that is part of a continuous airworthiness maintenance program
- an existing system of maintenance approved under CAR 1988.

3.3 Transport category aircraft

The RO of an aircraft type certified in the transport category must ensure scheduled inspections, scheduled maintenance, major repairs and modifications are carried out under the control of an AMO. However, simple maintenance tasks may be carried out by an independent LAME, as directed by the RO. These tasks include things like:

- oil and filter changes
- wheel and brake changes
- panel mounted avionics component replacements provided no specialist equipment is required
- MEL 'M' items
- other similar 'line' maintenance items which can be performed using simple methods and processes.

3.4 Other airworthiness requirements

The RO is responsible for ensuring all mandatory maintenance and inspection requirements are complied with. The mandatory maintenance and inspection requirements are:

- airworthiness directives (ADs)
- airworthiness limitation items (AWLs)
- if applicable, manufacturer's recommended maintenance items (see Recommended maintenance actions at 3.3.3 of this AC).

3.4.1 Airworthiness directives

Airworthiness directives (AD)s are issued by the national airworthiness authority (NAA) of the type certificate holder or CASA. When an AD is raised for an aircraft, engine, propeller, or aeronautical product by its certifying NAA, it is binding on affected aircraft in Australia.

Note: Foreign-issued ADs do not apply to limited category aircraft.[3]

3.4.2 Airworthiness limitations

Airworthiness limitations (AWL) set out mandatory retirement times for components and/or mandatory inspections. These items and inspections are approved by the certifying authority and may not be changed unless the changes are also approved by the certifying authority. They are required to be separately identified in an aircraft's ICAs as mandatory items.

ROs are responsible for ensuring that the AWLs relevant to their aircraft have been complied with and should familiarise themselves with the AWLs for their particular aircraft.

[3] Refer to AC 43-18 for further information.

Most small simple aircraft, particularly those certified before the 1980s, typically do not have any AWLs, however the RO should check the aircraft's type certificate data sheet (TCDS), which can be accessed on the applicable NAA's web site. There may be AWLs or Certification Maintenance Requirements (CMRs), which are also mandatory, listed in the TCDS for these older aircraft.

From time to time, the certifying NAA for an aircraft may approve a change to the AWLs. Such changes are not retrospective; they have effect for aircraft manufactured after the date of issue, or sometimes may be specified as affecting aircraft starting with a certain serial number. Aircraft manufactured before an approved change is made to the AWLs are not affected by the change unless the certifying NAA issues a direction requiring operators to comply with the changes. This is normally done by issuing an AD.

3.4.3 Recommended maintenance actions

Registered operators (RO) of aircraft should familiarise themselves with manufacturers' recommendations, however compliance is not mandatory unless an operator is required to, or chooses, use an inspection schedule that refers to manufacturer's ICAs.

3.4.4 Defects

A defect is any fault or imperfection in an aircraft or component that is not within design tolerances. It may be the result of manufacturing fault, wear, misuse, maintenance errors or accidental damage.

The RO is responsible for having defects rectified.

If an item of equipment is not required by the type certification specifications to be operable and is not an item of role or emergency equipment that is required for a flight or type of operation, then the RO may defer rectification until the next scheduled inspection. However, the RO must ensure a placard is placed on or near the item of equipment that is inoperable to ensure that the pilot is made aware of the unserviceability.

The RO is required to report major defects to the Type Certificate holder and CASA. Major defects may be reported electronically using the Defect Reporting Service on the CASA website or manually using form 404 Defect Report.

4 Record Keeping

4.1 Record keeping system

The RO is required to keep a system of records for the aircraft. Part 43 legislation does not prescribe how records are to be kept. The RO may choose the system of records keeping that suits their needs. Some examples of aircraft maintenance record keeping systems are:

- CASA logbook systems
- manufacturers' logbooks
- computer based systems[4]
- owner association forms
- flight and technical logs.

Part 43 of CASR does not prescribe how the RO records and tracks daily aircraft usage, defects and upcoming scheduled maintenance. Again, the RO can choose a system which best suits their needs. Some examples are:

- a version of the old maintenance release (the old form will no longer be printed however a printable WORD version will be available)
- flight times and defects are recorded in the aircraft logbook along with maintenance actions
- flight/technical log
- computer based system[5]
- owner association forms

4.2 What must be recorded?

The RO is responsible for ensuring maintainers make entries for maintenance in the aircraft records, including approving the aircraft for return to service.

The RO is responsible for keeping records of inspections of the aircraft, engine/s, propeller/s and rotor/s. The records of inspections should include:

- a brief description of the work
- the date
- the signature and certificate/licence number of the person approving the aircraft for return to service.

The RO is also responsible for keeping records of:

- total time in service of the aircraft, engine(s), propeller(s) and rotor(s)
- current status of life limited components if applicable

[4] Refer to AC 11-3(1) if considering using a computer-based record system.
[5] ibid.

- time since overhaul for components required to be overhauled (hours, cycles, landings etc.)
- aircraft inspection status, including the time since last inspection in accordance with the aircraft's inspection schedule or program
- the current status of ADs and AWL items
- certifications for major modifications and repairs and copies of the relevant data.

4.3 Retention of records

The RO must retain inspection records until the work is repeated or superseded or for a period of 12 months, whichever occurs first.

Records for altimeter and transponder checks are to be kept for 24 months or until repeated, whichever is earlier.

All other records are to be kept permanently and transferred to the new owner if the aircraft is sold.