

# Summary of proposed amendments to maintenance release and general provisions of Civil Aviation Order 100.5

Consultation draft Civil Aviation Order 100.5 Amendment Instrument 2017 (No.1)

August 2017

## Introduction

In 2015, CASA identified a number of airworthiness directives (ADs)—that prescribed general maintenance requirements—that did not satisfy the requirements under Part 39 of the *Civil Aviation Safety Regulations 1998* (CASR) for the issue of an AD . CASA published a consultation draft ([CD 1423MS](#)) proposing the transfer of the maintenance requirements to Civil Aviation Order (CAO) 100.5 and subsequently transferred these requirements through [Civil Aviation Order 100.5 Amendment Instrument 2015 \(No.1\)](#).

Subsequent feedback from industry has revealed a number of unintended consequences. CASA now proposes to amend CAO 100.5 to correct the matters raised in industry feedback, accommodate a number of policy developments, clarify some aspects of existing policy, and update the instructions for preparing, issuing and using the CASA maintenance release.

The proposed update to the maintenance release instructions would present the instructions as a legislative instrument issued under regulation 43 of the *Civil Aviation Regulations 1988* (CAR), parts of which would also be reproduced within the covers of the CASA Form 918 - *Maintenance Release (includes flight and technical records)* as new stock is printed after the amendment is registered.

## Purpose and scope of the proposed amendments

The draft *Civil Aviation Order 100.5 Amendment Instrument 2017 (No.1)* is provided at Annex A. To help industry understand these proposed changes in context, a reference compilation of CAO 100.5 is provided at Annex B.

The purpose of the proposed instrument is to:

- amend requirements for retention of maintenance records by removing the unintended requirement for a certificate of registration (COR) holder for an aircraft to retain referenced documents. As currently written, the regulations require a COR holder to retain all documents referenced in a maintenance certification for an aircraft, regardless of relevance
- introduce a provision to use computerised maintenance tracking print-outs for the purpose of listing required maintenance on a maintenance release. This option was

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requested by industry to provide an alternative to the current requirement for an authorised person to enter lengthy maintenance due lists by hand

- introduce a provision for issue of a maintenance release for aircraft engaged in flight training under Part 141 or 142 of CASR. This provision is necessary to facilitate the new flight training regulations and does not introduce any new requirements
- provide for some flexibility in for the specified duration between required maintenance actions
- add a provision for CASA to issue maintenance authorisations for maintenance of composite aircraft structures under regulation 42ZC of CAR. There is a shortage of approved maintainers for composite aircraft and this change would allow CASA to issue maintenance authorisations to suitably qualified composite maintainers. The requirements are more flexible than Part 66 licence requirements and would help to alleviate the shortage
- delete redundant Table 1, which contained a list of specified composite structure aircraft. The list is out of date, does not take into account the rapidly growing numbers of composite construction aircraft and leads to confusion about the status of composite aircraft that are not mentioned in the table. CASA proposes to align with globally accepted practice by defining what is a composite structure aircraft and making provision for maintenance of the general type
- clarify requirements for maintainers of airframe parachute systems used in general aviation recovery devices. This is a clarification with no change to existing requirements
- clarify the status of certification maintenance requirements and airworthiness limitations that are approved as part of an aircraft or engine certification package. This is a clarification with no change to existing requirements
- clarify certain database updating activities that are not regarded as maintenance of aircraft e.g. updating GPS maps by a pilot
- amend the definition of 'covered by a maintenance schedule' and make it clear that CAO 100.5 does not override approved systems of maintenance (e.g. if CAO 100.5 requires an annual check, but the system of maintenance only requires an equivalent check every 4 years, then the system of maintenance has precedence)
- specify that guidance material issued by CASA as a Civil Aviation Advisory Publication (CAAP), Advisory Circular or Airworthiness Bulletin may be treated as approved data, subject to conditions. This amendment makes provision for maintainers to access guidance materials and maintenance advice that has been produced by CASA, for use in cases where no other data is available for the purpose. It will give effect to a long standing policy expectation while filling an information gap. Use of such information is subject to conditions set out in regulation 2A, which gives hierarchic precedence to manufacturers' data, data specified in a system of maintenance, and data included in an approved modification or a maintenance direction issued by CASA
- remove the requirement to perform regular calibration checks on certain fuel quantity indication systems, as non-mechanical systems or systems with self-test functions do not require a 4-yearly calibration check that requires draining and refilling of the fuel tanks. This change will align the requirements with internationally accepted standards and established CASA policy of giving due consideration to manufacturers' published data where applicable, and to approved systems of maintenance that make provision for fuel system calibration.

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- remove the requirement to perform routine testing of emergency exits. CASA policy intent is that manufacturers' instructions should be observed, particularly in cases which require the maintainer to replace seals around the exit after the test
- delete requirements for testing combustion type aircraft cabin heaters. OEM instructions and state of design ADs now fully cover testing and maintenance of cabin heaters with the result that the CAO requirements are now redundant
- amend instructions for maintenance of towing release systems. This amendment will improve the wording of a number of provisions but will not introduce any additional requirements.
- specify standards for replenishing aircraft oxygen systems. These standards have been transferred from the obsolete CAO 108.26, which would then be repealed. The standards are still required for industry use and do not represent legislative change.
- amend instructions for testing fire protection systems in toilet areas. This is a clarification with no change to existing requirements.
- remove requirements to test automatic direction finding (ADF) and VHF omnidirectional radio range (VOR) systems in aircraft not flying under instrument flight rules (IFR). This restores the status quo, codifies changes made by CASA in a recent determination (CASA 47/16), and is therefore not a new change
- remove certain requirements relating to maintenance of aircraft engaged in approved single-engine turbine aeroplane operations. This amendment would remove requirements that are unique to Australia and would align Australian requirements with International Civil Aviation Organization standards and recommended practice
- insert a new Appendix (Appendix 3 to CAO 100.5), which would provide directions for the use of the CASA maintenance release. This provision would properly codify directions that are currently printed inside the front cover of the CASA Form 918 maintenance release book.

### **Impact on industry**

The proposed amendments remove unintended consequences that have been brought to CASA's attention by the aviation industry and will align CASA requirements with internationally recognised standards. The changes proposed in this amendment have been developed in close and detailed consultation with affected industry stakeholders, including maintenance controllers, the Gliding Federation of Australia, the Australian Parachute Federation, the Australian Skydiving Association and individual maintainers or operators who have contacted CASA with concerns about sections of the existing CAO. The draft amendment instrument has been referred back to all relevant individuals or groups to ensure that their concerns have been resolved and that no further unintended consequences have been introduced in the process. All of the stakeholders have indicated in writing that the changes would achieve their and CASA's common aims.

The majority of the amendments would have a positive impact on industry, by either deleting or reducing a range of requirements and thereby reducing compliance costs to industry. The new maintenance release directions would have a neutral effect on industry—being an updated iteration of existing instructions that are currently contained inside the front cover of Form 918. Some additional provisions that were formerly set out in CASA publication *Maintenance guide for engineers* have been included in Appendix 3 of the CAO to allow greater flexibility for users of maintenance releases.

### **Effect on other CASA publications**

CAAP 100.5-01 *Maintenance of aircraft - general requirements* and CAAP 43-01 *Maintenance release* have been updated to address the proposed changes that would be introduced by CAO 100.5 and to provide guidance for pilots, maintainers and certificate of registration holders who are affected by the CAO.

The draft CAAPs are available for comment and should be read in conjunction with the draft CAO amendment.

### **Regulation impact statement**

This amendment is a continuation of the amendments initiated in 2015. The Office of Best Practice Regulation (OBPR) assessed this proposal as minor and do not require further analysis in the form of a regulation impact statement (OBPR ID: 11547).

### **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 *Civil Aviation Order 100.5 Amendment Instrument 2017 (No. 1)* (Annex A, with compiled reference document Annex B) and associated draft CAAPs (Annexes C and D) should be submitted using the [online response form](#) by close of business **29 September 2017**.

### **How we handle your feedback**

At the end of the response period for public comment, we will register and review each comment and submission received through the online response form, but will not acknowledge individual responses. We will consider the submissions to this Consultation Draft before making any change to the regulations or other legislative instrument.

We will make all submissions publicly available on the CASA website unless a respondent requests that their submission remain confidential. Information about how we consult and how to make a confidential submission is available on the [CASA website](#).

When the CD submissions are published we will also publish a summary of consultation. The summary of consultation will summarise the feedback received, detail our plans for future policy, and outline any further consultation or planned rule making on this subject.

If we do change the rules, we will not publish an NFRM; information about the rule making will be available in the Explanatory Statement that is published with the final rule on the Federal Register of Legislation. You can subscribe to our [consultation and rule making mailing list](#) to be notified of future consultation or rule making on this subject.