

## Tech Notes

From the National Technical Manager 1<sup>st</sup> April 2015



Geoff Danes

I apologise that it has been a slow start this year for technical news information flowing to members. I was overseas on a work project during most of January and February. There has however been considerable activity still going on behind the scenes.

### ***CASA Instrument EX 51/15***

The existing CASA Instrument (EX 180/12) which allows exemption against certain CAR 42 maintenance requirements has been repealed and been replaced by (EX 51/15). This allows for the ongoing exemptions privileges for our members without any lapse of availability.

*(CASA EX 51\_15 attached)*

### ***ABE Weigh and Balance***

I can only report with extreme disappointment that the outcome to this project is still pending. I am lost for words to describe the CASA bureaucracy's lack of ability to deliver an exemption to permit the agreed permission in a timely fashion, given considerable effort that the SAAA has put into meeting the prerequisite criteria. The SASO office approved our training process in July 2014, but we are still awaiting the permission the exercise the agreed privileges. Indications are that it is now only a signature away for completion.

In the meantime CASA has now released Consultative Draft CD 1427MS in respect to CAO 100.7 and CAO 100.96. Although of course anyone is at liberty to make comment to CASA in respect to these proposed CAO changes, this CD is simply the introduction of a formal CASA process to implement the changes into the CAOs for which our (yet to be approved) exemption instrument will provide the interim solution. The exemption instrument was meant to be the "quick fix" whilst these CAO amendments will provide the permanent solution to the problem. The instrument will be retired once the CAO amendments are enacted.

After a few hick-ups, the necessary MPC certificates with W&B endorsement are now flowing out to those who have sat the exam and achieved the required pass mark. Please contact me if there is a problem with yours.

The expected instrument will require builder to note a SAAA authorization number for the weighing equipment being used. This authorization has already been issued to those scales for which I have received the required information.

### ***AD/GEN/87***

This Airworthiness Directive became effective on 1 February 2015 and will apply to all the amateur built aircraft fitted with the stated stainless steel cable hardware. Please read the AD carefully to determine how/if it applies to your aircraft. Mike Horneman has written an excellent article on this subject which will appear in the next Airsport edition.

Although the AD mandates replacement based upon "time in service", the SAAA recommends that you consider the circumstances carefully if your project had a long gestation period. If not properly stored, the damaging corrosion can be still be occurring whilst your project is under construction.

### ***SAAA IT***

During my time away overseas and in the recent weeks since the Avalon Airshow, I have been working with your Treasurer and Admin superintendent (Tony White) to improve the IT used by the SAAA. We are working to facilitate more convenient access via the SAAA website for members to all required information, and for reporting and purchasing. This is a significant project and very much a work in progress.



# Australian Government

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## Civil Aviation Safety Authority

Instrument number CASA EX51/15

I, PETER WILLIAM BOYD, Executive Manager, Standards Division, a delegate of CASA, make this instrument under regulation 11.160 of the *Civil Aviation Safety Regulations 1998 (CASR 1998)* and subsection 33 (3) of the *Acts Interpretation Act 1901*.

A handwritten signature in black ink, appearing to read 'Peter Boyd'.

Peter Boyd  
Executive Manager  
Standards Division

25 March 2015

### **Exemption — maintenance on limited category and experimental aircraft**

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#### **1 Duration**

This instrument:

- (a) commences on 1 April 2015; and
- (b) expires at the end of March 2017, as if it had been repealed by another instrument.

#### **2 Repeal**

Instrument CASA EX180/12 is repealed.

#### **3 Definition**

In this instrument:

**major design change** means a design change that has a significant effect on:

- (a) the weight and balance of the aircraft; or
- (b) the structural strength of the aircraft; or
- (c) the performance of the aircraft; or
- (d) the operational characteristics of the aircraft; or
- (e) other characteristics that may affect the validity of the special certificate of airworthiness or the experimental certificate for the aircraft.

#### **4 Application**

Subject to Schedule 1, this instrument applies to:

- (a) each person carrying out maintenance on a limited category or experimental aircraft; and
- (b) the registered operator of the aircraft.

## 5 Exemptions

The person or registered operator is exempt from compliance with the following provisions of the *Civil Aviation Regulations 1988 (CAR 1988)*:

- (a) regulation 42U;
- (b) paragraphs 42W (2) (b) and 42W (4) (a) and (c).

## 6 Conditions

The exemptions are subject to the conditions mentioned in Schedule 2.

### Schedule 1 Scope of application

- 1 This instrument does not apply to:
  - (a) maintenance of aircraft instruments and equipment specifically required by CASR 1998, CAR 1988 or the Civil Aviation Orders; or
  - (b) maintenance related to a condition of the special certificate of airworthiness or experimental certificate for the aircraft; or
  - (c) maintenance specified in an Airworthiness Directive or a direction issued by CASA applicable to the aircraft; or
  - (d) maintenance related to an instruction specified in the aircraft's approved maintenance data.
- 2 In relation to replacement of aircraft components, the exemption only has application if no replacement component is available to the registered operator.

### Schedule 2 Conditions

- 1 Subject to Schedule 1, if the maintenance is a modification or repair that is a major design change to the aircraft, the registered operator for the aircraft must not operate or allow the aircraft to be operated for flight after the modification or repair to the aircraft until all of the following have occurred:
  - (a) the registered operator has provided the following information in writing to CASA's Airworthiness and Engineering Branch, or an authorised person who holds power to make decisions under regulations 21.006A and 21.009 and the provisions of Subpart 21.M of CASR 1998, or a person who is authorised to issue a certificate of airworthiness in the category of the aircraft:
    - (i) a description of the repair or modification (and if the change or repair has been made, photographs of it);
    - (ii) the reasons for making the repair or modification;
    - (iii) how the repair or modification may affect any of the matters specified in the definition of **major design change** (for example, weight and balance);
    - (iv) why the repair or modification will not affect the safety of the aircraft;
  - (b) CASA, or the authorised person, after assessing the information provided:
    - (i) is satisfied that the aircraft can reasonably be expected to be safe when it is operated under the conditions limiting its intended use in its repaired or modified condition and the aircraft's maintenance schedule adequately takes into account the proposed repair or modification; and

- (ii) is satisfied the aircraft is not required to be the subject of further flight testing; and
    - (iii) informs the registered operator in writing that the modification or repair is acceptable.
  - 2 CASA, or the authorised person, may issue a new special certificate of airworthiness with appropriate conditions attached, if CASA or the authorised person considers that:
    - (a) the conditions limiting the aircraft's intended use in its repaired or modified condition are not adequate or appropriate; or
    - (b) the aircraft's maintenance schedule does not take into account the proposed repair or modification.
  - 3 If CASA, or the authorised person, considers flight testing to be necessary, CASA, or the authorised person, must issue an experimental certificate for the purpose under paragraph 21.191 (b) of CASR 1998, and the test flights must be conducted in accordance with any procedures or conditions specified on the certificate.
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## Explanatory Statement

### Civil Aviation Safety Regulations 1998

#### Exemption — maintenance on limited category and experimental aircraft

##### Legislation

Section 98 of the *Civil Aviation Act 1988* (the *Act*) empowers the Governor-General to make regulations for the Act and in the interests of the safety of air navigation.

Under regulations 21.189 and 21.195A of the *Civil Aviation Safety Regulations 1998* (**CASR 1998**), aircraft are not required to meet design standards in order to qualify for the issue of special certificates of airworthiness in the limited category or experimental certificates.

Regulation 42U of the *Civil Aviation Regulations 1988* (**CAR 1988**) provides that a person may modify or repair an Australian aircraft only if the design of the modification or repair has been approved, or taken to be approved, and the modification or repair is in accordance with that design. Paragraphs 42W (2) (b) and (4) (a) and (c) of CAR 1988 require a replacement component to be designed, manufactured and modified or repaired in compliance with a design standard.

These provisions have created problems for limited category and experimental aircraft. They impose an undue burden on:

- (a) CASA or any authorised person asked to approve the design of a modification or repair to 1 of these aircraft for which no design standard applies; and
- (b) persons who carry out maintenance on these aircraft, because unless the design of the modification or repair is specified by CASA in an Airworthiness Directive or direction, or is specified in the aircraft's approved maintenance data, these persons are not permitted to modify or repair the aircraft until the design is approved; and
- (c) registered operators because they must obtain approvals before having their aircraft modified or repaired.

Subregulation 11.160 (1) of CASR 1998 provides that, for subsection 98 (5A) of the Act, CASA may grant an exemption from a provision of the regulations, including CAR 1988, or a provision of the Civil Aviation Orders (the **CAOs**), in relation to a matter mentioned in that subsection. Under subregulation 11.160 (2), an exemption may be granted to a person, or to a class of persons, and may specify the class by reference to membership of a specified body or any other characteristic.

Under subregulation 11.205 (1) of CASR 1998, CASA may impose conditions on an exemption if this is necessary in the interests of the safety of air navigation. Under regulation 11.225 of CASR 1998, an exemption must be published on the Internet. Under subregulation 11.230 (1), an exemption ceases on the day specified within it (but no longer than 3 years after its commencement) or, if no day is specified, 3 years after commencement.

##### Instrument

The instrument exempts persons carrying out maintenance on limited category or experimental aircraft from compliance with the requirements of regulation 42U and paragraphs 42W (2) (b) and (4) (a) and (c) of CAR 1988. In the interest of aviation safety, the exemption does not apply to particular maintenance activities and is subject to conditions.

The instrument does not apply to:

- (a) maintenance of aircraft instruments and equipment specifically required by CASR 1998, CAR 1988 or the CAOs; or
- (b) maintenance related to a condition of the special certificate of airworthiness or experimental certificate for the aircraft; or
- (c) maintenance specified in an Airworthiness Directive or a direction issued by CASA applicable to the aircraft; or
- (d) maintenance related to an instruction specified in the aircraft's approved maintenance data.

The exemption is subject to the condition that if a modification or repair of an aircraft, or replacement of an aircraft component, is a major design change to the aircraft, as defined, the registered operator must, as soon as possible, provide CASA or an authorised person with details of the design change. Having considered the details, CASA or the authorised person may, if satisfied that the stated requirements are met, inform the registered operator that the modification or repair is acceptable. If they are not satisfied, CASA or the authorised person may issue a new special certificate of airworthiness or, if further flight testing is necessary, an experimental certificate, with appropriate conditions attached.

### ***Legislative Instruments Act 2003 (the LIA)***

For subsection 98 (5A) of the Act, CASA may, by instrument, grant an exemption from compliance with a provision of the regulations or the CAOs. An instrument issued under paragraph 98 (5A) (a) of the Act is a legislative instrument if the instrument is expressed to apply to a class of persons or aircraft. The exemption applies to a class of persons. The exemption is, therefore, a legislative instrument and is subject to tabling and disallowance in the Parliament under sections 38 and 42 of the LIA.

### **Consultation**

Consultation under section 17 of the LIA has not been undertaken in this case. The exemption is a reissue of CASA EX180/12 with no change to the substantive content of the instrument. CASA is continuing to work with industry to develop regulatory provisions that resolve the issues caused by the specified paragraphs of regulation 42W of CAR 1988.

### **Statement of Compatibility with Human Rights**

A Statement of Compatibility with Human Rights is at Attachment 1.

### **Making and commencement**

The exemption has been made by a delegate of CASA relying on the power of delegation under regulation 11.260 of CASR 1998.

The instrument commences on 1 April 2015. It expires at the end of March 2017 as if it had been repealed by another instrument.

[Instrument number CASA EX51/15]

## **Statement of Compatibility with Human Rights**

*Prepared in accordance with Part 3 of the  
Human Rights (Parliamentary Scrutiny) Act 2011*

### **Exemption — maintenance on limited category and experimental aircraft**

This legislative instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the  
*Human Rights (Parliamentary Scrutiny) Act 2011*.

#### **Overview of the legislative instrument**

The legislative instrument exempts persons carrying out maintenance on limited category or experimental aircraft from compliance with some of the requirements of the *Civil Aviation Regulations 1988* relating to modification and repair of the aircraft and the installation and use of aircraft components. In the interest of safety, the exemption is subject to conditions and its application does not include certain maintenance activities.

The primary effect of the legislative instrument is to avoid the imposition of impractical requirements relating to the maintenance of limited category and experimental aircraft.

#### **Human rights implications**

This legislative instrument does not engage any of the applicable rights or freedoms.

#### **Conclusion**

This legislative instrument is compatible with human rights as it does not raise any human rights issues.

**Civil Aviation Safety Authority**