Instrument number CASA 18/22

I, ANTHONY ALFRED STANTON, Branch Manager, Sport & Recreation Aviation, Stakeholder Engagement Division, a delegate of CASA, make this instrument under subregulations 42ZC (6) and (8) of the *Civil Aviation Regulations 1988* and regulation 201.001 of the *Civil Aviation Safety Regulations 1998*.

**[Signed. A.A. Stanton]**

Anthony A. Stanton
Branch Manager, Sport & Recreation Aviation
Stakeholder Engagement Division

25 February 2022

CASA 18/22 — Maintenance (Certain Amateur-built, Kit-built and Light Sport Aircraft) Instrument 2022

1 Name

 This instrument is *CASA 18/22 — Maintenance (Certain Amateur‑built, Kit‑built and Light Sport Aircraft) Instrument 2022*.

2 Duration

 This instrument:

(a) commences on 1 March 2022; and

(b) is repealed at the end of 28 February 2025.

3 Definitions

*Note*   In this instrument, certain terms and expressions have the same meaning as they have in the Act and the regulations. These include: ***ABAA***, ***amateur-built aircraft***, ***authorised person***, ***civil aviation legislation***, ***experimental certificate***, ***kit-built aircraft***, ***light sport aircraft***, ***maintenance release***, ***manned free balloon***and ***special certificate of airworthiness***.

 (1) In this instrument:

***AEL*** means aircraft engineer licence.

***group***, of builders,means 2 or more builders.

***knowledge level*** means a level of knowledge described in Annex 2.

***primary builder*** means:

(a) that member of a group of builders of a relevant aircraft who has fabricated and assembled more than half of an amateur-built aircraft or assembled more than half of a kit-built aircraft; or

(b) if paragraph (a) does not apply to any member of the group — that member who has been nominated in writing by the group as the primary builder for the purpose of issuing maintenance releases.

***relevant aircraft*** means an aircraft for which:

(a) a special certificate of airworthiness for an amateur-built aircraft accepted under an ABAA has been issued in accordance with regulation 21.190 of CASR; or

(b) a special certificate of airworthiness in the form of an experimental certificate has been issued in accordance with regulation 21.195A of CASR for a purpose mentioned in paragraph 21.191 (g), (h) or (j) of CASR.

 (2) Without limiting when 2 aircraft are not ***essentially similar***, 2 aircraft are not ***essentially similar***:

(a) if they are made of different materials; or

(b) if 1 has retractable landing gear and the other has fixed landing gear; or

(c) if 1 has electrically-powered landing gear and the other has hydraulically‑powered landing gear; or

(d) if 1 has electrically-powered flaps and the other has hydraulically-powered flaps.

4 Authorisations to carry out maintenance on relevant aircraft

 The following authorisations are given under subregulation 42ZC (6) of CAR for the purposes of paragraph 42ZC (4) (e):

(a) a person who has fabricated and assembled more than half of a relevant aircraft is authorised to carry out maintenance on:

 (i) the aircraft; and

 (ii) any relevant aircraft of which the person is the sole owner and that is essentially similar to the aircraft;

(b) a person (other than a person mentioned in paragraph (a)) who has contributed to the fabrication and assembly of an amateur-built aircraft that is a relevant aircraft is authorised to carry out maintenance on the aircraft;

(c) a person who has assembled more than half of a kit-built aircraft, or light sport aircraft, that is a relevant aircraft is authorised to carry out maintenance on:

 (i) the aircraft; and

 (ii) any relevant aircraft of which they are the sole owner and that is essentially similar to the aircraft;

(d) a person (other than a person mentioned in paragraph (c)) who has contributed to the assembly of a kit-built aircraft, or light sport aircraft, that is a relevant aircraft is authorised to carry out maintenance on the aircraft;

(e) the holder of an AEL, in a subcategory of category B1, or in category B2, granted under Part 66 of CASR is authorised to carry out maintenance on a relevant aircraft.

5 Appointment of authorised persons to issue maintenance releases and enter endorsements

(1) Subject to subsection (2), a person authorised to carry out maintenance on a relevant aircraft under section 4 is appointed to be an ***authorised person*** under regulation 201.001 of CASR:

(a) in relation to regulation 43 of CAR — to issue a maintenance release for the aircraft; and

(b) in relation to regulation 47 of CAR — to enter an endorsement on a maintenance release for the aircraft, stating that the aircraft is unairworthy; and

(c) in relation to regulation 48 of CAR — to cancel an endorsement mentioned in paragraph (b) for the aircraft, effecting a recommencement of the maintenance release.

 (2) Subsection (1) does not apply to a person who is authorised to carry out maintenance on a relevant aircraft by virtue of holding an AEL in category B2 granted under Part 66 of CASR (mentioned in paragraph 4 (e)) unless the person holds an AEL in a subcategory of category B1 granted under Part 66 of CASR.

*Note*Nothing in subsection (2) prevents the person from being an ***authorised person*** for the aircraft if they are authorised to carry out maintenance on the aircraft under another paragraph in section 4.

6 Conditions

 Each authorisation under section 4 and each appointment under section 5 is subject to the conditions mentioned in Schedule 1.

Schedule 1 Conditions

 1 An authorised person may only issue a maintenance release for an aircraft if all required maintenance has been carried out and properly certified by a person authorised to conduct maintenance under this instrument.

 2 An authorised person must sign each maintenance release that they issue under this instrument.

 3 For a maintenance release to be issued for an aircraft by a person mentioned in paragraph 4 (b) or (d), the authorised person must have been nominated in writing by the group of builders as the primary builder of the aircraft.

 4 A person authorised to carry out maintenance on an aircraft must do so:

(a) in accordance with the appropriate data for proper maintenance of the aircraft; and

(b) using the appropriate tooling.

 5 An authorised person must ensure that each maintenance release issued includes any information required to be entered on the maintenance release by any direction, permit or permission issued under the civil aviation legislation that applies to the aircraft, the aircraft components or the aircraft materials.

 6 When issuing a maintenance release, an authorised person must do so in accordance with the applicable requirements of Civil Aviation Order 100.5 and regulation 43 of CAR.

 7 A person mentioned in paragraph 4 (b) may only carry out maintenance on the elements of the aircraft the person fabricated and assembled.

 8 A person mentioned in paragraph 4 (d) may only carry out maintenance on the elements of the aircraft the person assembled.

 9 A person mentioned in paragraph 4 (e), who is not also a person mentioned in paragraph 4 (a), (b), (c) or (d) for the aircraft, may only carry out maintenance:

(a) that is covered by the person’s AEL; and

(b) on those types of aircraft or aircraft engines that are covered by the AEL; and

(c) subject to any conditions placed on the AEL.

 10 A person must not carry out manual welding unless the welding is carried out:

(a) by the person who performed the welding during the fabrication of the aircraft; or

(b) by a person who is the sole owner of the aircraft and performed the welding during the fabrication of a relevant aircraft that is essentially similar to the aircraft; or

(c) in accordance with an aircraft welding authority granted under regulation 33D of CAR.

 11 A person, who is not the holder of an AEL in category B2, must not carry out maintenance:

(a) on aircraft instruments or equipment that are specifically required by the civil aviation legislation for IFR operations; or

(b) specified in an airworthiness directive in relation to aircraft instruments or equipment that are required by the civil aviation legislation for IFR operations.

 12 Before a person performs any activity authorised by this instrument, the person must:

(a) satisfactorily complete a course of training which covers the topics and standards specified in column 1 of the table at Annex 1; and

(b) for each topic and standard — attain the knowledge level listed in column 2 of the table.

 13 Before a person performs any activity authorised by this instrument, the person must hold a ***certificate of attainment***, in the topics and standards specified in clause 12, from a course or an organisation mentioned in Annex 3.

 14 Clauses 12 and 13 do not apply to:

(a) a person mentioned in paragraph 4 (e); or

(b) for maintenance of a manned free balloon — a person who:

 (i) holds an authority issued under paragraph 33B (1) (a) of CAR; or

 (ii) is authorised under subregulation 42ZC (6) of CAR (other than by this instrument);

 to carry out maintenance on that balloon.

Annex 1

| Topics and standards for course of training |
| --- |
| Item | Column 1 | Column 2 |
|  | Topics and standards | Knowledge levels |
|  1 | ICAO and CASA’s obligations to ICAO |  1 |
|  2 | CASA priorities |  1 |
|  3 | Role of self-administering organisations |  1 |
|  4 | Australian Aviation Law overall structure |  1 |
|  5 | CARs that apply to maintenance by owner-builders |  1 |
|  6 | CASRs that apply to maintenance by owner-builders |  1 |
|  7 | Responsibility of registered operator |  3 |
|  8 | Responsibilities of maintainer |  3 |
|  9 | Guidance material for operators and maintainers |  1 |
|  10 | Type Certificates |  1 |
|  11 | Special Certificates of Airworthiness — amateur-built experimental, kit-built experimental, and amateur-built aircraft acceptance (ABAA) |  2 |
|  12 | Maintenance Authorities and CASR Part 66 Licences |  1 |
|  13 | Systems of Maintenance (***SOM***) — General |  1 |
|  14 | CASA SOM |  2 |
|  15 | Owner-generated SOM |  2 |
|  16 | Log book statement |  3 |
|  17 | Minimum Equipment Lists (MELs) |  1 |
|  18 | Flight manuals and placards |  2 |
|  19 | Maintenance data sources |  2 |
|  20 | CAR 2A approval of data |  1 |
|  21 | Automatic approvals of data from foreign national aviation authorities |  1 |
|  22 | Generic data |  1 |
|  23 | Airworthiness Directives (ADs) |  3 |
|  24 | Service Bulletins, Instructions and Notices |  2 |
|  25 | Major Defect reporting |  2 |
|  26 | Safety Management Systems |  1 |
|  27 | Human factors affecting maintenance |  1 |
|  28 | Safety in the aircraft workplace |  1 |
|  29 | Drugs and alcohol in safety sensitive aviation activities |  1 |
|  30 | Fuelling of aircraft |  1 |
|  31 | Continuing Airworthiness records |  2 |
|  32 | Weight and balance records |  2 |
|  33 | Recording of maintenance |  3 |
|  34 | Coordination of maintenance  |  2 |
|  35 | Certification of maintenance |  3 |
|  36 | Duplicate inspections of control systems after maintenance |  2 |
|  37 | Maintenance work sheets |  2 |
|  38 | Aircraft log book |  3 |
|  39 | Maintenance release |  3 |
|  40 | Modifications of aircraft |  1 |
|  41 | Approval of modification and major repair data |  1 |
|  42 | Use and care of calibrated equipment |  2 |
|  43 | Fabrication in the course of maintenance (FITCOM) |  2 |
|  44 | AD/ENG/4 Engine condition report |  3 |
|  45 | Authorised Release Certificate |  1 |

Annex 2

Knowledge levels

Level 1

 A familiarity with the principal elements of the topic such that the following objectives are met.

Objectives

* The applicant must be familiar with the basic elements of the topic
* The applicant must be able to give a simple description of the topic, using common words and examples
* The applicant must be able to use typical terms.

Level 2

A general knowledge of the theoretical and practical aspects of the topic and an ability to apply that knowledge, such that the following objectives are met.

Objectives

* The applicant must be able to understand the theoretical fundamentals of the topic
* The applicant must be able to give a general description of the topic using, as appropriate, typical examples
* The applicant must be able to demonstrate awareness of practical applications of the topic.

Level 3

 A detailed knowledge of the theoretical and practical aspects of the topic, and a capacity to combine and apply the separate elements of knowledge in a logical and comprehensive manner, such that the following objectives are met.

Objectives

* The applicant must be able to describe the underlying intent and implications of the topic
* The applicant must be able to give a detailed description of the topic using theoretical fundamentals and specific examples
* The applicant must be able to explain in detail the theoretical and practical application of the topic.

Annex 3

Training course and training organisations recognised by CASA for the purpose of this instrument

 1 Sport Aircraft Association of Australia (SAAA) Maintenance Procedures Course as approved by CASA.

 2 A CASR Part 147 Maintenance Training Organisation that is approved by CASA to provide category licence training.