



**Australian Government**  
**Civil Aviation Safety Authority**

Instrument number CASA 119/16

I, SHANE PATRICK CARMODY, Acting Director of Aviation Safety, on behalf of CASA, make this instrument under regulation 141.035 of the *Civil Aviation Safety Regulations 1998*.

**[Signed S. Carmody]**

Shane Carmody  
Acting Director of Aviation Safety

22 November 2016

**Approval — flight training for aeroplane firefighting endorsement**

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**1 Definitions**

(1) In this instrument, words and phrases have the same meaning as in Part 61 of CASR 1998, unless the contrary intention appears.

(2) In this instrument:

*AAAA* means the Aerial Application Association of Australia.

*aerial application operations* means aerial application operations under Part 137 of CASR 1998.

*aeronautical experience*, for paragraph 4 (3) (b), means aeronautical experience in the conduct of relevant firefighting operations in an aeroplane that is:

- (a) recorded in the HFO's, or the nominated senior pilot's, logbook; and
- (b) of such a nature and extent as to satisfy the HFO of his or her own, or the nominated senior pilot's, competency to conduct relevant firefighting operations.

*aeronautical experience*, for subparagraph 4 (3) (c) (i), means aeronautical experience as a pilot conducting flight training in an aeroplane that is:

- (a) recorded in the nominated senior pilot's logbook; and
- (b) of such a nature and extent as to satisfy the HFO of the nominated senior pilot's competency to conduct flight training.

*ARN* means aviation reference number.

*CASR 1998* means the *Civil Aviation Safety Regulations 1998*.

*fire control authority*, of a State or Territory, includes a parks, wildlife or forestry service.

*HFO* means head of flying operations of the operator.

*operator* means the operator mentioned in section 2.

*PICUS* means pilot in command under supervision.

*relevant flight training* means flight training for the grant of an aeroplane firefighting endorsement under Part 61 of CASR 1998.

*relevant firefighting operations* means aerial application operations in the form of firefighting operations.

**RPL** means recognition of prior learning.

- (3) A reference in this instrument to a provision that includes the numerals 61 is a reference to the provision in Part 61 of CASR 1998.

## **2 Application**

This instrument applies to an operator (the **operator**) who, for at least the 3 years immediately before first conducting relevant flight training under this approval instrument:

- (a) held an air operator's certificate (AOC) authorising the operator to undertake aerial application operations; and
- (b) had an operations manual containing procedures for relevant firefighting operations; and
- (c) had annually conducted relevant firefighting operations under the written authorisation of the National Aerial Firefighting Centre (NAFC), or of a State or territory fire control authority.

## **3 Approval**

I approve the operator to conduct relevant flight training.

## **4 Conditions**

- (1) Subject to section 5, the approval in section 3 is subject to the conditions set out in this section.

**Requirements for delivery of relevant flight training**

- (2) Relevant flight training may only be delivered by the following trainers:
  - (a) the HFO; or
  - (b) a senior pilot of the operator, nominated by the HFO (***nominated senior pilot***).

**Requirements for trainers**

- (3) The HFO or nominated senior pilot (as the case may be) must, at the time of delivering the relevant flight training:
  - (a) be authorised under regulation 61.1125 to exercise the privileges of the aeroplane firefighting endorsement; and
  - (b) have aeronautical experience in the conduct of relevant firefighting operations; and
  - (c) for a nominated senior pilot:
    - (i) have aeronautical experience as a pilot conducting flight training; or
    - (ii) be supervised by the HFO in the conduct of flight training.

**Requirements for trainees**

- (4) Relevant flight training may only be delivered to a trainee who has:
  - (a) a commercial pilot licence with an aeroplane category rating under Part 61; and
  - (b) an aeroplane aerial application endorsement under Part 61; and
  - (c) 250 hours' experience conducting aerial application operations in aeroplanes.

**Requirements for relevant flight training**

- (5) Relevant flight training must be delivered in accordance with a course of training prepared by the operator, which covers the matters mentioned in Schedule 1, including appropriate information about the pass standards for the aeronautical knowledge assessments, the practical flying assessment and the overall assessment.

#### Requirements for operator controls over relevant flight training

- (6) The operator must ensure that:
- (a) the relevant flight training complies at least with the conditions mentioned in subsections (2) to (5) of this section; and
  - (b) the aeronautical knowledge training, the practical flight training, and the assessments comply with the requirements set out in Schedule 1; and
  - (c) both the theoretical and practical components of the relevant flight training are conducted in a suitable ground environment and airspace, with appropriate facilities and training resources; and
  - (d) the aeroplane used for the relevant flight training is airworthy and suitable for the training; and
  - (e) each person conducting relevant flight training (including assessment) is competent to do so.

#### Requirements for operator records

- (7) The operator must prepare as soon as practicable, and retain in safe custody for at least 3 years from their creation, the following records for each trainee:
- (a) the trainee's name, ARN, and dates of commencement and ending of training;
  - (b) for each flight training activity, and each practical flying assessment, details of the following:
    - (i) the location;
    - (ii) the date;
    - (iii) the aircraft type, and nationality and registration marks;
    - (iv) the name and ARN of the instructor conducting the flight training activity;
    - (v) the name and ARN of the person conducting the practical flying assessment;
    - (vi) the flight time, and whether the flight was dual, solo or PICUS;
    - (vii) the record and results of the trainee's performance against the relevant competencies mentioned at Unit AA4 – Aeroplane operation, under Aerial Application Rating in Schedule 2 of the Part 61 Manual of Standards (the *MOS*);
  - (c) the results for each of the aeronautical knowledge assessments;
  - (d) a copy of the certificate of completion for the relevant training mentioned in subsection (8) of this section.

#### Requirement for a certificate of completion of training

- (8) The operator must issue a trainee, who successfully completes relevant flight training, with a certificate of completion which:
- (a) identifies the operator and the trainee; and
  - (b) records the trainee's marks for each of the aeronautical knowledge assessments, the practical flying assessment and the overall assessment.

*Note* A certified copy of the course completion certificate issued to the trainee must be submitted to CASA with the application for the aeroplane firefighting endorsement.

### **5 Conditions — RPL for aeronautical knowledge training only**

- (1) Despite section 4, a trainee may be considered to have passed the assessments for the aeronautical knowledge training mentioned in clause 1 of Schedule 1 for the purposes of clause 3, if:
- (a) on or after 1 September 2014, the trainee has successfully completed a fire awareness training course for firefighting pilots (an *RPL course*), conducted by:
    - (i) a fire control authority of a State or Territory; or

- (ii) the AAAA; and
- (b) the trainee provides the operator with a certified true copy of a certificate of completion of the RPL course, which identifies the training organisation and shows the date of completion of the course; and
- (c) the operator is satisfied, on the basis of reasonable inquiry and evidence, that the RPL course included training that covered the subject matter of each item mentioned in a paragraph of subclauses 1.1 and 1.2 of Schedule 1; and
- (d) the operator is satisfied with the trainee's relevant aeronautical knowledge, on the basis of 2 aeronautical knowledge assessments that are:
  - (i) comparable and consistent with the assessments mentioned in subclause 1.3 of Schedule 1 that would otherwise be required; and
  - (ii) conducted under the supervision of the HFO.
- (2) To avoid doubt, subsection 5 (1) does not affect any of the requirements under section 4, or under clauses 2 and 3 of Schedule 1.

## 6 Expiry

This instrument is repealed at the end of 31 August 2018.

## Schedule 1 Relevant flight training for an aeroplane firefighting endorsement

### 1 Aeronautical knowledge training

- 1.1 There must be at least a 1 day training course, followed by a written and oral assessment, covering the following (*aeronautical knowledge assessment 1*):
  - (a) fire behaviour;
  - (b) firefighting techniques;
  - (c) communication protocols;
  - (d) operator procedures;
  - (e) relevant procedures of fire control authorities.

*Note* Fire fighting includes what is colloquially known as “firebombing”.
- 1.2 There must be at least a separate 1 day training course, followed by a written and oral assessment, covering the following (*aeronautical knowledge assessment 2*):
  - (a) human factors;
  - (b) hazard awareness;
  - (c) risk management for firefighting operations.
- 1.3 Aeronautical knowledge assessments 1 and 2 must be conducted under the supervision of the HFO.

### 2 Practical flight training

- 2.1 Subject to subclauses 2.2 and 2.3, there must be dual flight training, covering at least the following, and progressing from simple to complex situations:
  - (a) flight preparation;
  - (b) access to water or retardant sources, and loading;
  - (c) transit to relevant location;
  - (d) approach and delivery of water or fire retardant;
  - (e) threat and error management;
  - (f) aeroplane performance management in the operational context;
  - (g) management of non-normal and emergency operations in the operational context;
  - (h) application of learning acquired under clause 1.

- 2.2 If the training aircraft is a single-seat aeroplane, the flight training mentioned in subclause 2.1 must be supervised under radio commands and observation from the ground or another aircraft.
- 2.3 Such additional solo or PICUS practice flights as are required by the instructor conducting the training, involving the targeted application of water or fire retardant.
- 2.4 The number and nature of the flights mentioned in subclause 2.3 must be such as to ensure that a level of competency is achieved, bearing in mind the trainee's existing flying qualifications and experience.
- 2.5 There must be a practical flying assessment based on the practical flight standards for the endorsement in the Part 61 MOS.

### **3 Overall assessment**

- 3.1 There must be an overall assessment based on aeronautical knowledge assessments 1 and 2 and the practical flying assessment.
  - 3.2 The overall assessment must not be a pass unless each of the aeronautical knowledge assessments and the practical flying assessment has been passed.
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