

Appendix B

Draft unit – Aerial application (night) training endorsement - FIR-TE13

FIR-TE13 Aerial application rating (night) training endorsement

1 Unit description

This unit describes the skills and knowledge required to effectively plan, conduct and administer training authorised by the aerial application rating (night) training endorsement.

2 Elements and performance criteria

2.1 FIR-TE13.1 – Demonstrate knowledge of competency based training as applied to night aerial application endorsement training

- (a) describe the structure, content and context of the Part 61 MOS operational rating and endorsement standards for the night aerial application endorsement;
- (b) describe the content of the flight test standards for an night aerial application endorsement;
- (c) state key competencies required by a pilot to operate at low-level at night safely;
- (d) state key competencies required by a pilot to operate in night aerial application operations safely.

2.2 FIR-TE13.2 - Demonstrate understanding of principles and methods of instruction

- (a) apply knowledge and application of element 3, principles and methods of instruction, described in unit FIRC (instructor rating – common) schedule 3 of Part 61 MOS.

2.3 FIR-TE13.3 – Conduct aeronautical knowledge training

- (a) conduct aeronautical knowledge training demonstrating applicable performance criteria described in elements FIR4.1 and FIR4.2 of unit FIR4 (conduct aeronautical knowledge training and flight training);
- (b) demonstrate extensive understanding of the aeronautical knowledge prescribed in unit AAGR (aerial application rating– all aircraft categories);
- (c) demonstrate extensive knowledge of the aeronautical knowledge prescribed in unit NVFR (night VFR rating – all aircraft categories);
- (d) demonstrate extensive understanding of the underpinning knowledge associated with each unit relevant to an night aerial application endorsement establishes trainee understanding of underpinning knowledge included in unit AA6 (night aerial application operation) and NVR2 (night VFR – single engine aircraft).

2.4 FIR-TE13.4 – Develop briefings and plan flight training

- (a) prepare a training plan that identifies each ground briefing and flight/flight simulator exercise required to achieve the standard for the issue of an aerial application rating and particular endorsements. The following units and elements are to be addressed:
 - (i) elements in units NTS1 and NTS2 to be addressed in relevant briefings and flight/flight simulator exercises as applicable; and
 - (ii) NVR2 – night VFR – single engine aircraft; and
 - (iii) AA6 – night aerial application operation.

- (b) identify potential threats and errors normally associated with night aerial application flight training and develop suitable mitigating actions for each flight exercise.

2.5 **FIR-TE13.5 – Conduct pre-flight briefing**

- (a) perform effective pre-flight briefings for each training exercise in the training plan, including application of standard operating procedures, demonstrating applicable performance criteria described in element FIR4.1 and FIR4.3 of unit FIR4 (conduct aeronautical knowledge training and flight training).

2.6 **FIR-TE13.6 – Conduct airborne training**

- (a) conduct flight training in accordance with the training plan demonstrating skills and behaviours described in element FIR 4.4 of unit FIR4 (conduct aeronautical knowledge training and flight training);
- (b) perform flying techniques and procedures to the competency standards specified for the issue of a night aerial application endorsement whilst occupying the instructor seat;
- (c) maintain situational awareness during all phases of the training exercise demonstrating the performance criteria specified in unit NTS1;
- (d) manage threats and errors during all phases of the flight demonstrating the performance criteria specified in unit NTS2;
- (e) recognise trainee errors and recover the aircraft when trainee capability or aircraft limitations may be exceeded.

2.7 **FIR-TE13.7 – Complete post-flight briefing**

- (a) conduct post-flight briefing demonstrating all performance criteria described in element FIR4.5 of unit FIR4 (conduct aeronautical knowledge training and flight training).

2.8 **FIR-TE13.8 – Complete post-training administration**

- (a) complete post-training administration demonstrating performance criteria in element FIR4.6 of unit FIR4 (conduct aeronautical knowledge training and flight training).

3 Range of variables

- (a) activities are performed in accordance with published procedures;
- (b) aeronautical knowledge training includes all units and elements of competency relevant to a night aerial application endorsement;
- (c) flight training includes all units and elements of competency relevant to a night aerial application endorsement and is supported by relevant pre and post flight briefings;
- (d) aircraft may include:
 - (i) fixed wing (single-engine, multi-engine);
 - (ii) helicopter (single-engine, multi-engine);
 - (iii) other commercial or military aircraft;
 - (iv) aircraft fitted with analogue or digital flight instruments.
- (e) aerodromes, operational airstrips or HLS;

- (f) approved low-flying areas;
- (g) environmental conditions may include:
 - (i) variable weather;
 - (ii) day or night VFR operations;
 - (iii) CTA and OCTA airspace;
 - (iv) turbulence;
 - (v) terrain;
 - (vi) sealed, gravel or grassed surfaces.

4 Underpinning knowledge of the following:

- (a) principles of instruction (FIR1, FIR2 and FIR3);
- (b) FIR4;
- (c) underpinning knowledge included in applicable units NVR2 and AA6;
- (d) relevant sections of Civil Aviation legislation;
- (e) common risks that exist when conducting night aerial application and night VFR training;
- (f) common problems that may occur when conducting night VFR training and night aerial application training and appropriate action that should be taken in each case;
- (g) role equipment;
- (h) aircraft configuration and performance in all phases of night aerial application operations;
- (i) assessment and workplace training competency standards;
- (j) principles of adult teaching and learning;
- (k) human performance and limitations factors relevant to the training tasks;
- (l) psychological factors affecting satisfaction of human needs, defence mechanisms and stress management;
- (m) relevant workplace policies and procedures;
- (n) appropriate methods of analysis and training planning;
- (o) lesson planning and development;
- (p) preparation of training resources;
- (q) principles of assessment;
- (r) assessment of behaviour;
- (s) self-assessment and evaluation;
- (t) questioning techniques;
- (u) requirements for completing training documentation.