

Appendix B

Draft unit – Design feature training endorsement - FIR-TE7

FIR-TE7 Design feature training endorsement

1 Unit description

This unit describes the skills and knowledge required to effectively plan, conduct and administer training authorised by a design feature training endorsement.

2 Elements and performance criteria

2.1 FIR-TE7.1 – Demonstrate knowledge of competency based training as applied to design feature endorsement training

- (a) describe the structure, content and context of the Part 61 MOS design feature endorsement standards;
- (b) state key competencies required by a pilot to operate an aircraft with a particular design feature.

2.2 FIR-TE7.2 – 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) in schedule 3 of Part 61 MOS.

2.3 FIR-TE7.3 – 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) establish trainee understanding of underpinning knowledge included in units for a particular design feature;

2.4 FIR-TE7.4 – Develop briefings and plan flight training

- (a) prepare a training plan that identifies each ground briefing and flight exercise required to achieve the standards for the issue of a particular design feature endorsement. The following units are to be addressed
 - (i) Elements in units NTS1 and NTS2 to be addressed in relevant briefings and flight exercises as applicable; and (as applicable)
 - (ii) DFE1 – tailwheel aeroplane
 - (iii) DFE2 – retractable undercarriage
 - (iv) DFE3 – manual propeller pitch control
 - (v) DFE4 – gas turbine engine
 - (vi) DFE5 – multi-engine centreline thrust aeroplane
 - (vii) DFE6 – pressurisation system
 - (viii) DFE7 – floating hull
 - (ix) DFE8 – floatplane and amphibious aircraft
 - (x) DFE9 – helicopter float alighting gear
- (b) identify potential threats and errors normally associated with the particular design feature flight training and develop suitable mitigating actions for each flight exercise.

2.5 FIR-TE7.5 – Conduct pre-flight briefing

- (a) perform effective pre-flight briefings for each flight 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-TE7.6 – Conduct airborne training

- (a) conduct flight training in accordance with the training plan demonstrating all 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 the particular design feature endorsement whilst occupying the instructor seat;
- (c) maintain situational awareness during all phases of the flight 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.

2.7 FIR-TE7.7 – Conduct 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-TE7.8 – 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 particular design feature endorsement;
- (c) flight training includes all units and elements of competency relevant to a particular design feature endorsement and is supported by relevant pre and post flight briefings;
- (d) aircraft may include:
 - (i) fixed wing (single-engine or multi-engine);
 - (ii) helicopter (single-engine or multi-engine);
 - (iii) aircraft fitted with analogue or digital flight instruments;
 - (iv) aircraft fitted with autopilots and/or flight management systems;
 - (v) aircraft fitted with equipment appropriate to the design feature.
- (e) approved flight simulation training devices (FSTD);
- (f) aerodromes or HLS;
- (g) environmental conditions may include:
 - (i) variable weather;

- (ii) day or night operations;
- (iii) CTA and OCTA airspace;
- (iv) turbulence;
- (v) terrain;
- (vi) sealed, gravel or grassed surfaces;
- (vii) variable water states.

4 Underpinning knowledge of the following:

- (a) principles of instruction (FIR1, FIR2 and FIR3);
- (b) FIR4;
- (c) underpinning knowledge included in units DFE1, DFE2, DFE3, DFE4, DFE5, DFE6, DFE7, DFE8 or DFE9 as applicable;
- (d) relevant sections of Civil Aviation legislation;
- (e) common risks that exist when conducting particular design feature training;
- (f) common problems that may occur when conducting particular design feature training and appropriate action that should be taken in each case;
- (g) assessment and workplace training competency standards;
- (h) principles of adult teaching and learning;
- (i) human performance and limitations factors relevant to the training tasks;
- (j) psychological factors affecting satisfaction of human needs, defence mechanisms and stress management;
- (k) relevant workplace policies and procedures;
- (l) appropriate methods of analysis and training planning;
- (m) lesson planning and development;
- (n) preparation of training resources;
- (o) principles of assessment;
- (p) assessment of behaviour;
- (q) self-assessment and evaluation;
- (r) questioning techniques;
- (s) requirements for completing training documentation.