Appendix B

Draft unit – Multi-crew pilot training endorsement - FIR-TE4

FIR-TE4   Multi-crew pilot training endorsement

1   Unit description

This unit describes the skills and knowledge required to effectively plan, conduct and administer training authorised by the multi-crew pilot training endorsement.

2   Elements and performance criteria

2.1   **FIR-TE4.1 – Demonstrate knowledge of competency based training as applied to training for a multi-crew pilot licence (MPL), ATPL and training in multi-crew cooperation (MCC).**

   (a)   describe the structure, content and context of the Part 61 MOS pilot licence and standards for the MPL and ATPL;

   (b)   describe the structure, content and context of the Part 61 MOS standards for multi-crew cooperation;

   (c)   describe how the unit of competency structure in the Part 61 MOS is applied to the conduct of flight training;

   (d)   state the competencies required by crew to operate effectively in a multi-crew operation;

   (e)   describe the content of the flight test standards for a MPL and ATPL.

2.2   **FIR-TE4.2 – demonstrate understanding of principles and methods of instruction**

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

2.3   **FIR-TE4.3 – 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 understanding of aeronautical knowledge prescribed in schedule 3 of Part 61 MOS for MPL, ATPL and MCC, to the standard required for issue of an ATPL;

   (c)   establish trainee understanding of underpinning knowledge specified in schedule 2 of Part 61 MOS for MPL, ATPL and MCC, to the standard required for issue of an ATPL;

2.4   **FIR-TE4.4 – Develop briefings and plan flight training**

   (a)   prepare a training session to achieve training objectives in accordance with a training plan that identifies each ground briefing and practical exercise required to achieve the specified standard: Elements in the following units to be addressed in relevant briefings/practical exercises as applicable:

   NTS1, NTS2, C2, C3, C5, IFF, IFL, RNE, MCO; and

        (i)   for MPL - C1, NAV , CIR, IAP2, IAP3 and TR-MEA;

        (ii)   for ATPL (aeroplanes) - CIR, IAP2, IAP3 and TR-MEA;

        (iii) for helicopters - NAV, HSE and HME.

(b)   prepare to deliver training in MCC, in accordance with elements 9.2 and 9.3 of unit FIR 9 (multi-crew training endorsement);

(c)   identify potential threats and errors associated the practical training and develop suitable mitigating actions for each training exercise;

(d)   develop training scenarios to demonstrate upset prevention and recovery techniques, including intervention strategies that mitigate risks of negative learning;

(e)   plan training within the limitations and characteristics of the aircraft or flight simulation training device that adhere to validated procedures .

2.5   **FIR-TE4.5 – Conduct pre-flight briefing**

(a)   conduct effective pre-flight briefing for a training session 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-TE4.6 – Conduct practical training**

(a)   conduct training in accordance with the training plan demonstrating all skills and behaviours described in element FIR 4.4 of unit FIR4 (conduct of aeronautical knowledge training and flight training);

(b)   perform flying techniques and procedures to the competency standards specified for the issue of a MPL or ATPL in the aircraft or flight simulator whilst occupying the instructor seat;

(c)   conduct training in MCC demonstrating all performance criteria described in element FIR9.4 of unit FIR9 (multi-crew training endorsement);

(d)   demonstrate the application of scenario based training methodology for multi-crew operations;

(e)   state the benefits of utilising position freezes when conducting training in flight simulation training devices;

(f)   describe the risks associated with aircraft reposition when used to conduct training in a flight simulation training device;

(g)   maintain situational awareness during all phases of the training exercise demonstrating the performance criteria specified in unit NTS1;

(h)   manage threats and errors during all phases of the flight demonstrating the performance criteria specified in unit NTS2;

(i)   deliver training in upset prevention and recovery in accordance with developed scenarios applicable to the aircraft category and type;

(j)   identify and minimise negative learning events and manage occurrences;

(k)   recognise trainee errors and recover the aircraft when trainee capability or aircraft limitations may be exceeded.

2.7 **FIR-TE4.7 – 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);

(b) discuss observed negative learning events to mitigate risks to learning;

(c) identify and address any underpinning knowledge deficiencies.

2.8 **FIR-TE4.8 – 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 the MPL, ATPL and MCC as applicable;

(c) flight training includes all units and elements of competency relevant to a MPL, ATPL or MCC and is supported by relevant pre and post flight briefings;

(d) aircraft of the type which the licence applies and 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.

(e) approved flight simulation training device;

(f) aerodromes or HLS;

(g) simulated abnormal and emergency situations;

(h) simulated hazardous weather;

(i) for aeroplanes, upset conditions include:

  (i) pitch attitude more than 25 degrees nose up;

  (ii) pitch attitude more than 10 degrees nose down;

  (iii) bank angle more than 45 degrees;

  (iv) flying at airspeeds inappropriate for the conditions.

(j) for helicopters, upset conditions may include:

  (i) vortex ring state;

  (ii) ground resonance;

  (iii) loss of tail rotor effectiveness;

  (iv) low 'g' and mast bumping;

  (v) overpitching or low RRPM – rotor stall;

  (vi) retreating blade stall;

    (vii)   recirculation;

    (viii) dynamic rollover.

(k) environmental conditions may include:

    (i)   variable weather;

    (ii)   day or night operations;

    (iii) VFR or IFR

    (iv) CTA and OCTA airspace;

    (v)   turbulence;

    (vi) terrain;

    (vii) hazards and threats

    (viii) sealed, gravel or grassed surface

4   Underpinning knowledge of the following:

(a) units FIR4 and FIR9;

(b) the underpinning knowledge included in applicable units prescribed for the MPL, ATPL or MCC;

(c) relevant sections of Civil Aviation legislation;

(d) common risks that exist when conducting VFR and/or IFR operations (as applicable);

(e) assessment and workplace training competency standards;

(f) principles of adult teaching and learning;

(g) human performance and limitations factors relevant to the training tasks;

(h) psychological factors affecting satisfaction of human needs, defence mechanisms and stress management;

(i) relevant workplace policies and procedures;

(j) appropriate methods of analysis and training planning;

(k) lesson planning and development;

(l) preparation of training resources;

(m) principles of assessment;

(n) assessment of behaviour;

(o) self-assessment and evaluation;

(p) questioning techniques;

(q) requirements for completing training documentation.