

## **Appendix B**

### **Draft unit – Winch & rappelling operations training endorsement - FIR-TE17**

## **FIR-TE17 Winch and rappelling operations training endorsement**

### **1 Unit description**

This unit describes the skills and knowledge required to effectively plan, conduct and administer training authorised by the winch and rappelling operations training endorsement.

### **2 Elements and performance criteria**

#### **2.1 FIR-TE17.1 – Demonstrate knowledge of competency based training as applied to low-level rating with winch and rappelling operations endorsement training**

- (a) describe the structure, content and context of the Part 61 MOS operational rating and endorsement standards for the winch and rappelling operations endorsement;
- (b) describe the content of the flight test standards for a low-level rating with winch and rappelling operations endorsement;
- (c) describe the requirements for a low-level rating with winch and rappelling operations flight review;
- (d) state key competencies required by a pilot to operate at low-level conducting winch and/or rappelling operations safely.

#### **2.2 FIR-TE17.2 - 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-TE17.3 – 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 underpinning knowledge included in unit LL-WR Winch and rappelling operations;
- (c) establish trainee understanding of underpinning knowledge included in units LL-H and LL-WR;
- (d) establish applicants understanding of the underpinning knowledge specified in section 4 of the unit LL-WR for the low-level rating under review, in accordance with the flight review requirements described in schedule 7 of the Part 61 MOS.

#### **2.4 FIR-TE17.4 – Develop briefings and plan flight training**

- (a) prepare a training that identifies each ground briefing and flight exercise required to achieve the standard for the issue of a winch and rappelling endorsement. 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) LL-H – helicopter low-level operations (elements applicable to winch and rappelling operations and local environmental conditions);
  - (iii) LL-WR – winch and rappelling operations.

- (b) identify potential threats and errors normally associated with winch and rappelling operations and develop suitable mitigating actions for each flight exercise.

#### 2.5 **FIR-TE17.5 – 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);
- (b) demonstrate applicable performance criteria described in element FIR 7.1 (conduct flight review).

#### 2.6 **FIR-TE17.6 – 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 low-level rating with winch and rappelling operations endorsement whilst occupying the instructor seat;
- (c) maintain situational awareness during all phases of the training exercise demonstrating the performance criteria specified in NTS1;
- (d) manage threats and errors during all phases of the flight demonstrating the performance criteria specified in unit NTS2;
- (e) demonstrate applicable performance criteria described in elements FIR 7.2 (conduct flight review).

#### 2.7 **FIR-TE17.7 – 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-TE17.8 – 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 winch and rappelling operations endorsement;
- (c) flight training includes relevant units and elements of competency for the winch and/or rappelling operations endorsement and is supported by pre and post flight briefings;
- (d) aircraft may include:
  - (i) helicopter (single-engine or multi-engine);
  - (ii) other commercial or military helicopter;
  - (iii) helicopter fitted with analogue or digital flight instruments.

- (e) aerodromes or HLS;
- (f) winching/rappelling must be carried out with a crewman;
- (g) crew may include:
  - (i) single pilot;
  - (ii) multi-crew;
- (h) environmental conditions may include:
  - (i) variable weather;
  - (ii) day or night operations;
  - (iii) NVFR may include:
    - (A) Unaided;
    - (B) NVIS;
  - (iv) CTA and OCTA airspace;
  - (v) turbulence;
  - (vi) terrain;
  - (vii) sealed, gravel or grassed surfaces

#### **4 Underpinning knowledge of the following:**

- (a) principles of instruction (FIR4);
- (b) underpinning knowledge included in applicable units LL-H and LL-WR;
- (c) relevant sections of Civil Aviation legislation;
- (d) common risks that exist when conducting winching/rappelling operations endorsement training;
- (e) common problems that may occur when conducting winching/rappelling operations training and appropriate action that should be taken in each case;
- (f) assessment and workplace training competency standards;
- (g) principles of adult teaching and learning;
- (h) human performance and limitations factors relevant to the training tasks;
- (i) psychological factors affecting satisfaction of human needs, defence mechanisms and stress management;
- (j) relevant workplace policies and procedures;
- (k) appropriate methods of analysis and training planning;
- (l) lesson planning and development;
- (m) preparation of training resources;
- (n) principles of assessment;
- (o) assessment of behaviour;

- (p) self-assessment and evaluation;
- (q) questioning techniques;
- (r) requirements for completing training documentation.