**LESSON TE3-45A: BASIC NAVIGATION – LONG BRIEF**

**FLIGHT INSTRUCTOR RATING – GRADE 3 TRAINING ENDORSEMENT (Helicopter) LESSON PLAN & TRAINING RECORD**

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| **TRAINEE NAME:** |  | | | **TRAINEE ARN:** | |  |
| **INSTRUCTOR DEMONSTRATION DATE:** |  | | **TRAINEE READ BACK DATE (S):** |  | |  |
| **Performance Standard** | | | | | | |
| **3** | | **2** | | | **1** | |
| Has received training in the element, however is not able to consistently demonstrate competency to the standard required for the grant of the authorisation | | Is able to achieve competency to the standard required for the grant of the authorisation on the majority of occasions. | | | Achieves competency to the standard required for the grant of the authorisation. | |
| **Lesson Overview**   * Preparation and read back of long brief for **Basic Navigation** * Demonstration of pre-flight brief for **Basic navigation** * The blueprint for this long brief is the operator’s approved lesson (long brief) from their PPL/CPL syllabus * Lesson objectives and underpinning knowledge to be demonstrated as applicable during long briefing | | | | | | |
| **Training Notes**   1. The instructor should emphasise that this briefing provides the core skills of helicopter pilot navigation as well as navigation using navigation aids and systems as a supplement to visual navigation. The instructor must emphasise the importance of focus on basic navigational techniques particularly at PPL level. 2. Sufficient ground time should be planned into the training course to allow the instructor to guide the trainee instructor through the additional knowledge and skill requirements for CPL students. These requirements should be incorporated into the advanced long brief as optional short briefings as required. 3. The discussion of CPL requirements should reference the additional knowledge prescribed in the CPL units in schedule 3 of Part 61 MOS. 4. The long briefing should address    * Navigation equipment    * Pre-flight briefing - obtaining and analysing weather forecasts, weather reports and NOTAMs    * Route selection and preparation of navigation charts    * Factors influencing choice of cruising levels    * Last light calculations and considerations    * Calculation of estimated fuel consumption, fuel reserves, operational requirements and preparation of fuel log    * Preparation and submission of flight plan    * Departure and arrival procedures/restrictions – non-towered aerodrome or landing area    * Operations in Class G airspace, airspace restrictions (prohibited, restricted and danger areas)    * Visual navigation techniques (e.g. dead reckoning, ‘time-to-map-to-ground’, the ‘one-in-sixty’ rule)    * Navigation checklist procedures, maintenance of navigation log    * Aircraft handling considerations, fuel management and use of fuel log    * Radio communication procedures    * SAR requirements | | | | | | |

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| **MOS**  **Reference** | **Lesson Content** *(Elements & Performance Criteria)* | **Performance Standard** | |
| **Required** | **Achieved** |
| **FIR-TE3.2** | **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. | 1 |  |
| **FIR-TE3.3** | **Demonstrate Competencies of a grade 3 training endorsement** |  |  |
| (a) | apply good knowledge of the aeronautical knowledge units of competency for the RPL, PPL and CPL to the standard required for the issue of a CPL; | 1 |  |
| (c) | perform consistent management of lessons safely, efficiently and confidently; | 1 |  |
| **FIR-TE3.4** | **Conduct aeronautical knowledge training** |  |  |
| (f) | conduct aeronautical knowledge training demonstrating relevant performance criteria described in elements FIR4.1 and FIR4.2 of unit FIR4 (conduct aeronautical knowledge training and flight training) |  |  |
|  | **FIR4.1 Plan training** |  |  |
|  | (a) confirm trainee readiness for proposed training through review of training records to confirm their competency status | 1 |  |

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| **MOS**  **Reference** | **Lesson Content** *(Elements & Performance Criteria)* | **Performance Standard** | |
| **Required** | **Achieved** |
|  | (b) identify training objectives based on performance criteria in the manual of standards and operator’s training plans; | 1 |  |
|  | (c) identify underpinning knowledge for the units and elements relevant to the lesson and confirm trainee understanding | 1 |  |
|  | (d) select appropriate training methods to facilitate training objectives and knowledge transfer | 1 |  |
|  | (e) apply threat and error management into each ground lesson; | 1 |  |
|  | (g) select appropriate training resources and confirm availability and serviceability of required facilities, equipment, training aids, reference material and the airworthiness of the training aircraft or device. | 1 |  |
|  | **FIR4.2 Conduct aeronautical knowledge training** |  |  |
|  | (a) establish a learning environment and motivation that suits the trainee's needs | 1 |  |
|  | (b) clearly state the training objectives | 1 |  |
|  | (c) conduct the lesson following or modifying the lesson plan to achieve training objectives and transfer of knowledge | 1 |  |
|  | (d) present and link new knowledge to previous knowledge; | 1 |  |
|  | (e) use selected training aids to illustrate and enhance explanations | 1 |  |
|  | (f) apply appropriate instructional techniques; instruction is to the point using clear and deliberate speech; | 1 |  |
|  | (g) deliver technical knowledge accurately and clearly to the required standard; | 1 |  |
|  | (h) provide opportunities for trainee participation and practice; | 1 |  |
|  | (i) discuss threat and error management issues and ensure application understood by the trainee; | 1 |  |
|  | (j) confirm training objectives is confirmed by questioning, review and other suitable methods | 1 |  |
|  | (k) provide feedback on trainee performance; | 1 |  |
|  | (l) develop trainee self-assessment skills; | 1 |  |
|  | (m) complete training objectives in the time available; | 1 |  |
|  | (n) ensure training is conducted effectively. | 1 |  |
| **FIR-TE3.5** | **Develop Briefings and Plan flight training** |  |  |
| (g) | prepare a training plan that identifies each ground briefing and flight exercise required to achieve the standards for the issue of an RPL, PPL and CPL (including training required for the issue of an endorsement on an RPL). The following units and elements are to be addressed: |  |  |
|  | for helicopters |  |  |
|  | elements in the following units to be addressed in relevant briefings/flight exercises as applicable |  |  |
|  | 1. C1 through C5 2. CTR, CTA, ONTA and OGA | 1 |  |
|  | ground briefings and flight exercises prepared for |  |  |
|  | (xxii) NAV, RNE, ONTA, OCA, OGA and CTA (Basic navigation) | 2 |  |
| **FIR-TE3.6** | **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 relevant performance criteria described in element FIR4.1 and FIR4.3 of unit FIR4 (conduct aeronautical knowledge training and flight training). |  |  |
|  | **FIR4.3 Conduct pre-flight briefing** |  |  |
|  | (a) confirm trainee is mentally and physically prepared for flight training; | D |  |
|  | (b) brief trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight | D |  |
|  | (c) link previous training to the current exercise | D |  |
|  | (d) brief the trainee on how the flight will be conducted to meet the training outcomes | D |  |
|  | (e) confirm the trainee's ability to recall the training outcomes, underpinning knowledge, handling technique and planned flight scenario | D |  |
|  | (f) discuss the environmental conditions and suitability for the training exercise; | D |  |
|  | (g) discuss threat and error management issues applicable to the proposed flight and confirm the trainee understands her or his responsibility for managing those issues (airmanship). | D |  |

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| **MOS Ref** | **Underpinning knowledge** |
| **FIR-TE3** | **Grade 3 training endorsement** |
|  | 1. Principles and methods of instruction (see unit FIRC); 2. underpinning knowledge included for the applicable units (for RPL, PPL and CPL and aircraft class rating) required for the lesson; |

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| **COMMENTS AND OUTCOME (INCLUDING ELEMENTS & PERFORMANCE CRITERIA THAT REQUIRE CONSOLIDATION AND/OR REMEDIAL TRAINING)** | |
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| **Instructor’s Signature & Date** | **Trainee’s Signature & Date** |
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