**LESSON TE3-54: TAIL ROTOR MALFUNCTIONS – LONG BRIEF & PRE-FLIGHT 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 of long brief for **Tail Rotor Malfunctions** * Read back of long brief for **Tail Rotor Malfunctions** * Demonstration of pre-flight brief for **Tail Rotor Malfunctions** * 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 long briefing should address    * Known hazards with the potential to cause tail rotor failure.    * Causes of loss of tail rotor thrust    * Jammed control scenarios    * Procedures as per the AFM emergency section.    * Extending the range in the cruise by using low power settings    * Techniques for handling TR malfunctions in low and high thrust scenarios.    * Use of the detent position on the throttle for landing (R22/R44 only) 2. The pre-flight brief should include a review of the tail rotor malfunctions considerations as covered in the long brief 3. The flight instructor manual provides useful references for some of the subject matter that should be included in this lesson 4. The pre-flight brief should demonstrate the integration of HF/NTS considerations required for safe flight introduced in previous lessons including reviewing with the student the application of situational awareness to identify real or potential threats to safety and management of undesired aircraft state that can result from unmanaged threats and errors the use of available resources to support mitigating actions | | | | | | |

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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** | |  |  |
| (g) | 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 |  |
|  | (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 |  |

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| **MOS**  **Reference** | **Lesson Content** *(Elements & Performance Criteria)* | **Performance Standard** | | |
| **Required** | | **Achieved** |
|  | (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; with instruction 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 have been achieved 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** | |  |  |
| (h) | 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 | |  |  |
|  | (ii) C1 through C5 | | 1 |  |
|  | Ground briefings and flight exercises prepared for | |  |  |
|  | (xxix) H7.3 and H7.4 – Tail rotor malfunctions | | 1 |  |
| **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)** | |
|  | |
| **Instructor’s Signature & Date** | **Trainee’s Signature & Date** |
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