**Lesson TE9-20 – Night navigation - pre-flight brief and flight training**

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| **Trainee name:** |  | **Trainee ARN:** |  |
| **Instructor name** |  | **Instructor ARN** |  |
| **Demonstration date** |  | **Trainee read back date:** |  |

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| **PERFORMANCE STANDARDS** | | | |
| **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**   * Demonstration of pre-flight brief for night navigation * Demonstration of in-flight lesson for night navigation * Read back of pre-flight brief for night navigation * Read back of in-flight lesson for night navigation * The blueprint for the pre-flight brief and in-flight lesson is the operator’s approved lesson from their NVFR syllabus * Lesson objectives and underpinning knowledge to be demonstrated as applicable during readback | | | |
| **TRAINING NOTES**   * Before demonstrating the pre-flight brief, the instructor should take time to explain the objectives of the brief to the trainee instructor including the actual content of the brief and any training aids that will be used. The pre-flight brief must include the performance criteria for NVR2 or NVR3 (as applicable). Encourage the trainee instructor to participate as the student pilot would do. * Units NTS1 and NTS2 are described to element level only. The trainee instructor will already have demonstrated competency to performance standard 1 in previous lessons. If the trainee instructor does not meet the standard in this lesson the element/performance criteria must be identified in the consolidation/remedial training section to be addressed in the next lesson. * The lesson presumes the trainee instructor has flight instructor rating with a grade 3 training endorsement and so has experience in conducting navigation training by day. * On completion of the demonstration, summarise the structure and delivery method of the pre-flight brief. * The trainee read back should be conducted after they have had the opportunity to prepare. The instructor should role play a student pilot during the read back. The read back should be followed by a de-brief from the instructor against the performance criteria. * The instructor should guide the trainee through the preparation of navigation routes to ensure all the required elements are addressed during the student’s training. * Before demonstrating the in-flight lesson, the instructor should explain the sequence of the training elements and provide guidance on appropriate delivery techniques. The in-flight demonstration should also focus the trainee on the differences between day and night navigation training. * On completion of the in-flight lesson, the instructor should debrief the instructor against the performance criteria being cognisant that the trainee, in most instances, will have previous instructional experience in delivering navigation training by day. * The suggested pre-flight brief duration refers only to the actual pre-flight brief duration. Refer to ground and flight summary for suggested ground hours. * Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson. * Where it has not been possible to introduce performance criteria or the trainee has not achieved the required standard, the performance criteria must be covered during the next lesson. Enter these performance criteria in the lesson record for the subsequent lesson. | | | |
| **MOS**  **reference** | **UNDERPINNING KNOWLEDGE** | | |
| **FIR-TE9** | **Night VFR training endorsement** | | |
|  | 1. principles of instruction (FIR4); 2. underpinning knowledge included in applicable units IFF, IFL 3. underpinning knowledge included for the applicable units required for a night VFR rating; 4. relevant sections of Civil Aviation legislation; 5. assessment and workplace training competency standards; 6. principles of adult teaching and learning; 7. relevant workplace policies and procedures; 8. lesson planning and development; 9. preparation of training resources; 10. questioning techniques; 11. requirements for completing training documentation. | | |

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| **MOS**  **reference** | **LESSON CONTENT**  **(Elements & Performance Criteria)** | **Performance standard** | |
| Required | Achieved |
| **FIR-TE9.1** | **Demonstrate knowledge of competency based training as applied to Night VFR rating training** |  |  |
| (d) | state key competencies required by a pilot to operate under the night VFR safely | 1 |  |
| **FIR-TE9.2** | **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-TE9.4** | **Plan flight training** |  |  |
| (a) | prepare a training plan that identifies each ground briefing and flight/flight simulator exercise, required to achieve the standards for the issue of a NVFR rating. The following units and elements are to be addressed |  |  |
|  | elements in units NTS1 and NTS2 to be addressed in relevant briefings and flight exercises as applicable; and |  |  |
|  | (i) basic instrument flight | 1 |  |
|  | (ii) conduct of traffic pattern at night | 1 |  |
|  | (iv) navigation aid orientation and tracking | 1 |  |
|  | (v) flight planning under the night VFR | 1 |  |
|  | (vi) arrival and departure at night (including 1 engine inoperative considerations where applicable) | 1 |  |
|  | (vii) navigation under the VFR at night (including use of ground based and satellite based navigational systems as applicable) | 1 |  |
|  | (viii) visual approach procedures at night | 1 |  |
| (b) | identify potential threats and errors normally associated with flight training at night and develop suitable mitigating action for each flight exercise. | 1 |  |
| **FIR-TE9.5** | **Conduct pre-flight briefing** |  |  |
| (a) | perform effective pre-flight briefings for each training session in the training plan, including the 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); |  |  |
|  | **FIR4.1 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 |  |
|  | (f) identify potential threats and errors in a flight lesson, including those associated with simulation of abnormal or emergency procedures or aircraft mishandling by trainee, and consider suitable mitigators; | 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 |  |
|  | **FIR4.3 Conduct pre-flight briefing** |  |  |
|  | (a) confirm the trainee is mentally and physically prepared for flight training; | 1 |  |
|  | (b) brief the trainee on the training outcomes, the associated performance criteria and the actions required of the trainee during the flight; | 1 |  |
|  | (c) link previous training to the current exercise; | 1 |  |
|  | (d) brief the trainee on how the flight will be conducted to meet the training outcomes; | 1 |  |
|  | (e) confirm the trainee’s ability to recall the training outcomes, underpinning knowledge, handling technique and planned flight scenario; | 1 |  |

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| **MOS**  **reference** | **LESSON CONTENT**  **(Elements & Performance Criteria)** | **Performance standard** | |
| Required | Achieved |
|  | (f) discuss the environmental conditions and their suitability for the training exercise; | 1 |  |
|  | (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). | 1 |  |
| **FIR-TE9.6** | **Conduct flight training** |  |  |
| (a) | conduct flight training in accordance with the training plan demonstrating all skills and behaviours described in element FIR4.4 of unit FIR4 (conduct aeronautical knowledge training and flight training) |  |  |
|  | **FIR4.4 Conduct airborne training** |  |  |
|  | (a) manage responsibilities as pilot in command for the safe operation of the aircraft; | 1 |  |
|  | (b) apply flying techniques and procedures to the competency standards specified for the qualification being trained for whilst occupying the instructor seat; | 1 |  |
|  | (c) demonstrate the task: |  |  |
|  | (i) introduce tasks in manageable portions without trainee overload; | 1 |  |
|  | (ii) make clear, concise and systematic explanations; | 1 |  |
|  | (iii) coordinate demonstration with explanation of manoeuvre; | 1 |  |
|  | (iv) make coordinated control inputs without abrupt manoeuvring, using accepted techniques; | 1 |  |
|  | (v) demonstrate the manoeuvre to the competency standards specified in this manual for a commercial pilot. | 1 |  |
|  | (d) direct the task : |  |  |
|  | (i) implement handover and takeover procedures for control of aircraft; | 1 |  |
|  | (ii) provide direction appropriate to trainee’s progress; | 1 |  |
|  | (iii) provide instructions in a clear, concise and timely manner; | 1 |  |
|  | (iv) provide sufficient practice for the trainee to achieve the task; | 1 |  |
|  | (v) intervene only to the extent necessary to assist the trainee’s progress or to maintain safety. | 1 |  |
|  | (e) monitor the task (unassisted practice): |  |  |
|  | (i) identify the trainee’s deficiencies and provide feedback to assist the trainee in achieving the standard; | 1 |  |
|  | (ii) provide and vary additional instruction and demonstration as necessary to assist the trainee; | 1 |  |
|  | (iii) ensure remedial training is effective such that errors are corrected; | 1 |  |
|  | (iv) encourage the trainee to develop self-assessment skills; | 1 |  |
|  | (v) note training events for debriefing and assessment. | 1 |  |
|  | (f) intervene to recover the aircraft if trainee does not manage an undesired aircraft state; | 1 |  |
|  | (g) develop the trainee‘s responsibility through the application of human factors principles for threat and error management | 1 |  |
| (b) | performs flying techniques and procedures to the competency standards specified for the issue of a night VFR rating whilst occupying the instructor seat | 1 |  |
| (c) | maintain situational awareness during all phases of flight demonstrating the performance criteria specified in unit NTS1; |  |  |
|  | **NTS1 Non-technical Skills 1** |  |  |
|  | NTS1.1 Maintain effective lookout | 1 |  |
|  | NTS1.2 Maintain situational awareness | 1 |  |
|  | NTS1.3 Assess situations and make decisions | 1 |  |
|  | NTS1.4 Set priorities and manage tasks | 1 |  |
|  | NTS1.5 Maintain effective communications and interpersonal relationships | 1 |  |
| (c) | manage threats and errors during all phases of the flight demonstrating the performance criteria specified in unit NTS2; |  |  |
|  | **NTS2 Non-technical Skills 2** |  |  |
|  | NTS2.1 Recognise and manage threats | 1 |  |
|  | NTS2.2 Recognise and manage errors | 1 |  |

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| **MOS**  **reference** | **LESSON CONTENT**  **(Elements & Performance Criteria)** | **Performance standard** | |
| Required | Achieved |
|  | NTS2.3 Recognise and manage undesired aircraft state | 1 |  |
| **FIR-TE9.7** | **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); |  |  |
|  | **FIR4.5 Conduct post-flight briefing** |  |  |
|  | (a) encourage the trainee to self-assess performance against the performance criteria; | 1 |  |
|  | (b) describe clearly and accurately, significant details of the trainee’s performance and assess the trainee’s achievement against the training outcomes for the lesson and associated performance criteria; | 1 |  |
|  | (c) identify any deficiencies in performance and suggest remedial actions and training; | 1 |  |
|  | (d) discuss threat and error management issues encountered during the flight; | 1 |  |
|  | (e) brief the trainee on the details of the next training exercise; | 1 |  |
| **FIR-TE9.8** | **Conduct post-training administration** |  |  |
| (a) | complete post-training administration demonstrating performance criteria in element FIR4.6 of unit FIR 4 (conduct aeronautical knowledge training and flight training). |  |  |
|  | **FIR4.6 Complete post-training administration** |  |  |
|  | (a) record achievement, or otherwise, of competency, any remedial training required and identify content of the next training exercise; | 1 |  |
|  | (b) complete administration procedures required for issue of an endorsement or military equivalent where applicable. | 1 |  |
|  | (c) inform relevant staff of trainee’s performance and results where required; | 1 |  |
|  | (d) review effectiveness of training and identify any adjustments to delivery, presentation and content for improvement, and discuss with appropriate stakeholders. | 1 |  |

**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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