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| --- | --- | --- | --- | --- | --- |
| Flight no: | RPL(A)3.\_\_\_\_ | Trainee name & ARN: |  | | |
| Date: |  | Instructor: |  | | |
| Aircraft registration: |  | Aircraft type: |  | Flight time: |  |

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| Lesson Overview  * Establish and maintain various types of climb and descent * Entry and levelling off sequence * Normal (cruise), best rate (Vy) and best angle (Vx) climbs * Effect of undercarriage (if retractable), flap and power on the climb * Cruise, glide and approach descents * Effect of wind, undercarriage (if retractable), flap and power on the glide |

| PRE-FLIGHT KNOWLEDGE  Long Briefing: 0.8 hour Pre-flight Briefing: 0.3 hour  Underpinning knowledge: as required | |
| --- | --- |
| Content | |
| **Long briefing** – Climbing and Descending   * Aerodynamic forces acting on the aeroplane during climb and descent * Attitude flying * Power + attitude + configuration = performance * Maintenance of straight flight during climb and descent * Entry and levelling off sequence (e.g. Power, Attitude, Trim - Attitude, Power, Trim) * Normal, best rate (Vy) and best angle (Vx) climbs * Climb performance - effect of power, wind and aeroplane configuration * Glide performance - best glide speed, effect of aeroplane configuration, weight and wind * Descending at various airspeeds, effect of power & flap * Instrument indications * Application in flight | |
| **Underpinning knowledge**   * Review/expand previously introduced knowledge as required * Typical aeroplane performance characteristics & the effect of local weather conditions [A1 4(e)] * Factors affecting take-off and initial climb performance [A2 4(b)] * Aeroplane performance [A3 4(e)] * Engine considerations during prolonged climbing and descending [A3 4(l)] * Aircraft performance in a glide (straight and turning) [A6 4(i)] | |
| **HF & NTS**   * Fitness for flight * Use of checklists [NTS2 4(h)] * Principles of ‘see and avoid’ * Visual limitations * Visual scan technique - use of clock code * Lookout technique prior to and during climb and descent * Monitor engine temperature and pressure * Hand over/take over technique (e.g. ‘I have control – you have control’) * Control technique | |
| **Pre-flight briefing**   * Review flight sequences, what to expect, see & do * Check essential knowledge * Reinforce threat & error management * Reinforce significant airmanship points | |
| **Pre-flight knowledge components complete:** | **Instructor’s signature & date** |

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| Performance Standard | | |
| **3** | **2** | **1** |
| Has received training in the element, however is not able to consistently demonstrate competency to the standard required for qualification issue | Demonstrates a developing level of proficiency, and is deemed safe to conduct solo practice under direct supervision | Achieves competency to the standard required for qualification issue |

| FLIGHT TRAINING  Suggested flight time: 1.0 hour dual | | | |
| --- | --- | --- | --- |
| MOS Reference | Lesson Content (Elements & Performance Criteria) | Performance  Standard | |
| Required | Achieved\* |
| 1. C4.1 | Plan fuel requirements |  |  |
|  | conduct transmission and receipt of radio communications using appropriate procedures and phraseology | 3 |  |
|  | determine the total fuel required for the flight | 3 |  |
| 1. C4.2 | Manage fuel system |  |  |
|  | verify fuel quantity on-board aircraft prior to flight using two independent methods | 3 |  |
|  | ensure the fuel caps are secured | 3 |  |
|  | perform fuel quality check prior to flight | 3 |  |
|  | ensure fuel drain cocks are closed | 3 |  |
| 1. A3.1 | Climb aeroplane |  |  |
|  | operate and monitor all aircraft systems when commencing, during, and completing a climbing flight manoeuvre | 3 |  |
|  | adjust altimeter subscale according to applicable settings | 3 |  |
|  | identify and avoid terrain and traffic | 3 |  |
|  | for the following climbing manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre: |  |  |
|  | * + 1. cruise climb | 3 |  |
|  | * + 1. best angle climb | 3 |  |
|  | * + 1. best rate climb | 3 |  |
|  | anticipate level-off altitude and achieve straight and level flight | 3 |  |
| 1. A3.3 | Descend aeroplane |  |  |
|  | operate and monitor all aircraft systems during descending flight manoeuvres | 3 |  |
|  | for the following descending manoeuvres select power, attitude and configuration as required for the flight path, balance and trim the aeroplane accurately, and apply smooth, coordinated control inputs to achieve the required flight tolerances that apply to the manoeuvre: |  |  |
|  | * + 1. glide | 3 |  |
|  | * + 1. powered | 3 |  |
|  | * + 1. approach configuration descent (flap and undercarriage) | 3 |  |
|  | anticipate level-off altitude and achieve straight and level flight | 3 |  |
| 1. NTS1.1 | Maintain effective lookout |  |  |
|  | perform airspace-cleared procedure before commencing any manoeuvre | 3 |  |
| 1. NTS1.4 | Set priorities and manage tasks |  |  |
|  | organise workload and priorities to ensure optimum outcome of the flight | 3 |  |

\*Enter the performance standard achieved if it is different to that required

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.

| CONSOLIDATION AND/OR REMEDIAL TRAINING | | | |
| --- | --- | --- | --- |
| MOS Reference | Lesson Content (Elements & Performance Criteria) | Performance  Standard | |
| Required | Achieved |
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| DEBRIEFING |
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| Content |
| * Training review and outcomes achieved against lesson objectives and the Part 61 MOS competency standards * Recommendations for next lesson (including any carryover/remedial training) * Trainee preparation for next lesson * Training record completion and sign off |

| COMMENTS AND OUTCOME | | |
| --- | --- | --- |
|  | | |
| **Proceed to next training session?** | **Yes** | **No** |

| Instructor’s signature & date | Trainee’s signature & date |
| --- | --- |
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