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| --- | --- | --- | --- | --- | --- |
| Flight no: | CPL(H) 13.\_\_\_ | Trainee name & ARN: |  | | |
| Date: |  | Instructor: |  | | |
| Aircraft registration: |  | Aircraft type: |  | Flight time: |  |

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| Lesson Overview  * Practice previously learned autorotational techniques * Apply the forced landing drill * Learn techniques to arrive at nominated landing spots * Learn engine failure techniques on take-off and approach |

| PRE-FLIGHT KNOWLEDGE  Long Briefing: 1.0 hour Pre-flight Briefing: 0.3 hour  Underpinning knowledge: as required | |
| --- | --- |
| Content | |
| **Long briefing** – Practice Forced Landings   * Zero or reduced speed autorotation, s-turns, 360 degree turns * Forced landing drill, including Mayday call and passenger brief. * Procedures for ditching and landing in inhospitable surroundings (not for practice) * Aerodynamics associated with increased range and increased endurance configurations. | |
| **Underpinning knowledge** (relevant to the stage of training):   * Review/expand previously introduced knowledge as required * Memorize the mayday call and passenger brief format. * Managing passengers during abnormal or emergency situations [C5(a)] | |
| **HF & NTS**   * Carefully assess traffic in the vicinity before and during the HASEL checks. * Maintain traffic awareness during the entire descent. * Abide by the recommendations of RHC Safety Notice SN-38 (if applicable) * Hand over/take over technique (Emphasis on student remaining highly receptive to instructor’s corrective inputs) * Control technique (Emphasis on rotor RPM) * Careful assessment of ground conditions for run-on landings * No aft cyclic after ground contact | |
| **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. C1.2 | Operational communication using an aeronautical radio |  |  |
|  | maintain effective communication with others on operational matters | 2 |  |
|  | communicate effectively in unfamiliar, stressful or non-standard situations | 2 |  |
| (h) | respond to transmissions and take appropriate action | 2 |  |
| (i) | recognise and manage communication errors and misunderstandings effectively | 2 |  |
| (j) | seek clarification in the time available if a message is unclear or uncertainty exists | 2 |  |
| k) | react appropriately to a variety of regional accents | 2 |  |
| (l) | communicate effectively in unexpected, stressful or non-standard situations using standard phraseology or plain English | 2 |  |
| 1. NTS1.3 | Assess situations and make decisions |  |  |
|  | identify problems | 3 |  |
|  | analyse problems | 3 |  |
|  | identify solutions | 3 |  |
|  | assess solutions and risks | 3 |  |
|  | decide on a course of action | 3 |  |
|  | communicate plans of action (if appropriate) | 3 |  |
|  | allocate tasks for action (if appropriate) | 3 |  |
|  | take actions to achieve optimum outcomes for the operation | 3 |  |
|  | monitor progress against plan | 3 |  |
|  | re-evaluate plan to achieve optimum outcomes | 3 |  |
| 1. NTS1.4 | Set priorities and manage tasks |  |  |
|  | organise workload and priorities to ensure optimum outcome of the flight | 3 |  |
|  | plan events and tasks to occur sequentially | 3 |  |
|  | anticipate events and tasks to ensure sufficient opportunity for completion | 3 |  |
|  | use technology to reduce workload and improve cognitive and manipulative activities | 3 |  |
| 1. H4.1 | Carryout pre-take-off checks |  |  |
|  | pre-take-off checks and safety briefings are completed | 2 |  |
|  | select a safe take-off path | 2 |  |
|  | helicopter is lined up in the take-off direction and positioned at the optimum position within the helicopter landing site (HLS) | 2 |  |
|  | line-up checks are performed in accordance with approved checklist, when appropriate | 2 |  |
| 1. H4.2 | Take-off helicopter |  |  |
|  | air traffic control clearances are obtained and compliance is maintained with clearance conditions and requirements (within controlled airspace) | 2 |  |
|  | helicopter is transitioned from a stationary position in a specified direction passing through translational lift, remaining clear of obstructions and establishing and maintaining a recommended or nominated climb speed | 2 |  |
|  | helicopter flight path is controlled using appropriate control techniques including awareness of helicopter performance considerations, aircraft balance and flight control trim (if applicable) | 2 |  |
|  | power and attitude are managed for the flight path, departure profile and Indicated Airspeed (IAS) being flown | 2 |  |
|  | local and published noise abatement requirements and curfews are observed | 2 |  |
|  | situational awareness of circuit traffic is maintained and conflict is avoided | 2 |  |
| 1. H4.3 | Approach to hover |  |  |
|  | a suitable termination point is selected | 2 |  |
|  | pre-landing checks are completed in accordance with approved checklist | 2 |  |
|  | appropriate approach angle and track is intercepted and approach manoeuvres are conducted in accordance with air traffic control instructions (when in controlled airspace) | 2 |  |
|  | helicopter is descended to the hover at the selected termination point at a reducing rate of closure and along a specified track on an approach angle appropriate to the helicopter type and conditions | 2 |  |
|  | align the landing gear to the planned approach direction | 2 |  |
|  | recognise and control loss of translational lift | 2 |  |
|  | RPM is managed within normal operational limits | 2 |  |
|  | approach is terminated at the hover over the termination point | 2 |  |
| 1. H5.1 | Climb helicopter |  |  |
|  | from straight and level flight, adjust attitude and power to achieve a climb at normal, best rate (VY), best angle (VX) and cruise climb flight configurations | 2 |  |
|  | appropriate altimeter settings are set | 2 |  |
|  | helicopter is maintained in balanced flight during adjustments to power | 2 |  |
|  | power is maintained as altitude increases | 2 |  |
|  | helicopter is levelled off from climb at nominated altitude | 2 |  |
|  | lookout is maintained during climb using a systematic scan technique at a rate determined by traffic density, visibility and terrain | 2 |  |
|  | situational awareness is maintained | 2 |  |
| 1. H5.2 | Maintain straight and level flight |  |  |
|  | adjust attitude and power to achieve a constant height, heading and speed while remaining in balanced flight | 2 |  |
|  | lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility or terrain | 2 |  |
|  | natural horizon is used as primary attitude reference | 2 |  |
|  | nominated altitude is maintained | 2 |  |
| 1. H5.3 | Descend helicopter |  |  |
|  | adjust attitude and power to enter and maintain a descent from straight and level | 2 |  |
|  | helicopter is levelled from a descent at a nominated altitude | 2 |  |
|  | lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility or terrain | 2 |  |
|  | clearance ahead and below is maintained | 2 |  |
|  | air traffic control altitude restrictions are observed (as required) | 2 |  |
|  | helicopter does not exceed aircraft flight manual limits during descent | 2 |  |
|  | set appropriate altimeter settings | 2 |  |
|  | situational awareness is maintained at all times during helicopter descent | 2 |  |
| 1. H5.4 | Turn helicopter |  |  |
|  | attitude and power are adjusted to enter and maintain turns at varying rates from level, climbing and descending flight to achieve nominated tracks, during: |  |  |
|  | (i) level turns | 2 |  |
|  | (ii) climbing turns with 20° bank angle | 2 |  |
|  | (iii) powered descending turn with 30° bank angle | 2 |  |
|  | helicopter is rolled out from the turn to achieve a nominated heading or geographical feature | 2 |  |
|  | ensure helicopter is balanced and trimmed (if applicable) | 2 |  |
|  | lookout is maintained in direction of turn and above or below using a systematic scan technique at a rate determined by traffic density, visibility and terrain | 2 |  |
|  | engine operating limits are not exceeded | 2 |  |
| 1. H6.2 | Perform autorotative flight |  |  |
|  | an appropriate action plan including task priorities is formulated that ensures the safe completion of autorotative manoeuvres | 2 |  |
|  | autorotative flight is entered and maintained at a nominated speed and heading in balanced flight | 2 |  |
|  | autorotative flight is performed at the optimum range and minimum descent rate speeds | 2 |  |
|  | heading is altered through 180° and 360° with the helicopter in balanced flight at a nominated speed | 2 |  |
|  | helicopter is recovered to normal flight from autorotative flight using power to a climb at nominated heading and speed | 2 |  |
|  | helicopter is recovered to a power termination into wind, using appropriate control inputs, the helicopter is flared at the appropriate height to reduce groundspeed and reduce rate of descent, control RRPM in limits, the helicopter is levelled and power is used to reduce rate of descent and establish a hover or hover taxi, control yaw throughout | 2 |  |
| (h) | lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility and terrain | 2 |  |
| (i) | situational awareness is maintained at all times during autorotative flight | 2 |  |
| 1. H7.1 | Manage a forced landing from level flight, after take-off and on approach |  |  |
|  | emergency situation requiring a forced landing is correctly identified | 3 |  |
|  | autorotative flight is entered and established at nominated speed and heading in balanced flight | 3 |  |
|  | immediate actions are performed | 3 |  |
|  | control RRPM within limitations | 3 |  |
|  | a landing area within autorotative distance is selected and an appropriate action plan is formulated to ensure safety of the helicopter | 3 |  |
|  | emergency procedures are implemented and task priorities are allocated to all actions to ensure aircraft, flight crew and passenger safety | 3 |  |
|  | emergency radio message of intentions are transmitted | 3 |  |
|  | helicopter is aligned with prevailing wind direction when possible with as slow as practical ground speed while maintaining control of the helicopter; situational awareness is maintained at all times during forced landing manoeuvres | 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 |
| --- |
| 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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