|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Flight no: | CPL(H) 32.\_\_\_ | Trainee name & ARN: |  | | |
| Date: |  | Instructor: |  | | |
| Aircraft registration: |  | Aircraft type: |  | Flight time: |  |

|  |
| --- |
| Lesson Overview  * Consolidation of all previously learned emergency techniques |

| PRE-FLIGHT KNOWLEDGE  Long Briefing: Review Previous Emergencies briefs as required.  Pre-flight Briefing: 0.3 hour  Underpinning knowledge: as required | |
| --- | --- |
| Content | |
| **Long briefing** – Review previous emergencies briefs as required | |
| **Underpinning knowledge** (relevant to the stage of training):   * Review/expand previously introduced knowledge as required | |
| **HF & NTS**   * Hand over/take over technique * Control technique (Emphasis on Rotor RPM and throttle management) * Careful assessment of ground conditions for run-on landings * No aft cyclic after ground contact * 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) | |
| **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** |

|  |  |  |
| --- | --- | --- |
| 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\* |
| **C2.2** | **Perform pre-flight inspection** |  |  |
| (d) | report to, and seek advice from, qualified personnel to determine the action required in relation to any identified defects or damage | 3 |  |
| (f) | certify the aircraft flight technical log entering any defects or endorsements to permissible unserviceabilities as appropriate | 3 |  |
| (g) | complete and certify the daily inspection (if authorised to do so) | 3 |  |
| **C3.1** | **Operate radio equipment** |  |  |
| (a) | confirm serviceability of radio equipment | 1 |  |
| (b) | conduct transmission and receipt of radio communications using appropriate procedures and phraseology | 1 |  |
| (c) | maintain a listening watch and respond appropriately to applicable transmissions | 1 |  |
| (d) | conduct appropriate emergency and urgency transmissions | 1 |  |
| **C3.2** | **Manage R/T equipment malfunctions** |  |  |
| (a) | perform radio failure procedures | 1 |  |
| (b) | use fault finding procedures and perform corrective actions | 1 |  |
| **C3.3** | **Operate Transponder** |  |  |
| (a) | operate a transponder during normal, abnormal and emergency operations | 1 |  |
| (b) | recall transponder emergency codes | 1 |  |
| **NTS2.1** | **Recognise and manage threats** |  |  |
| (a) | identify relevant environmental or operational threats that are likely to affect the safety of the flight | 1 |  |
| (b) | identify when competing priorities and demands may represent a threat to the safety of the flight | 1 |  |
| (c) | develop and implement countermeasures to manage threats | 1 |  |
| (d) | monitor and assess flight progress to ensure a safe outcome, or modify actions when a safe outcome is not assured | 1 |  |
| **NTS2.2** | **Recognise and manage errors** |  |  |
| (a) | apply checklists and standard operating procedures to prevent aircraft handling, procedural or communication errors | 1 |  |
| (b) | identify committed errors before safety is affected or the aircraft enters an undesired state | 1 |  |
| (c) | monitor the following to collect and analyse information to identify potential or actual errors: |  |  |
|  | (i) aircraft systems using a systematic scan technique | 1 |  |
|  | (ii) the flight environment | 1 |  |
|  | (iii) other crew | 1 |  |
| (d) | implement countermeasures to prevent errors or take action in the time available to correct errors before the aircraft enters an undesired state | 1 |  |
| **NTS2.3** | **Recognise and manage undesired aircraft state** |  |  |
| (a) | recognise an undesired aircraft state | 1 |  |
| (b) | prioritise tasks to ensure an undesired aircraft state is managed effectively | 1 |  |
| (c) | apply corrective actions to recover an undesired aircraft state in a safe and timely manner | 1 |  |
| **H6.1** | **Turn helicopter steeply** |  |  |
| (a) | lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility or terrain | 2 |  |
| (b) | level turns of 45° bank angle is achieved without altitude change to nominated heading | 2 |  |
| (c) | descending turns of 45° bank angle is achieved to a nominated heading and minimum height loss of 500ft | 2 |  |
| (d) | maintain balance in turns | 2 |  |
| (e) | helicopter operating limits are not exceeded | 2 |  |
| **H6.2** | **Perform autorotative flight** |  |  |
| (a) | an appropriate action plan including task priorities is formulated that ensures the safe completion of autorotative manoeuvres | 1 |  |
| (b) | autorotative flight is entered and maintained at a nominated speed and heading in balanced flight | 1 |  |
| (c) | autorotative flight is performed at the optimum range and minimum descent rate speeds | 1 |  |
| (d) | heading is altered through 180° and 360° with the helicopter in balanced flight at a nominated speed | 1 |  |
| (e) | helicopter is recovered to normal flight from autorotative flight using power to a climb at nominated heading and speed | 1 |  |
| (f) | 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 | 1 |  |
| (g) | helicopter autorotative landing to touchdown is performed into wind, using appropriate control inputs, the helicopter is flared at the appropriate height to reduce groundspeed and reduce rate of descent, the helicopter is levelled prior to touchdown and collective is used to reduce rate of descent and cushion the landing, control yaw throughout. The landing is completed in accordance with the procedures in the aircraft flight manual | 3 |  |
| (h) | lookout is maintained using a systematic scan technique at a rate determined by traffic density, visibility and terrain | 1 |  |
| (i) | situational awareness is maintained at all times during autorotative flight | 1 |  |
| **H7.1** | **Manage a forced landing from level flight, after take-off and on approach** |  |  |
| (a) | emergency situation requiring a forced landing is correctly identified | 1 |  |
| (b) | autorotative flight is entered and established at nominated speed and heading in balanced flight | 1 |  |
| (c) | immediate actions are performed | 1 |  |
| (d) | control RRPM within limitations | 1 |  |
| (e) | a landing area within autorotative distance is selected and an appropriate action plan is formulated to ensure safety of the helicopter | 1 |  |
| (f) | emergency procedures are implemented and task priorities are allocated to all actions to ensure aircraft, flight crew and passenger safety | 1 |  |
| (g) | emergency radio message of intentions are transmitted | 1 |  |
| (h) | 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 | 1 |  |
| **H7.2** | **Manage an engine failure at the hover or during taxi** |  |  |
| (a) | hover heights and taxi surfaces are selected to maximise options in the event of an engine failure | 1 |  |
| (b) | emergency situation involving an engine failure is correctly identified | 1 |  |
| (c) | immediate actions are performed in accordance with the aircraft flight manual | 1 |  |
| (d) | perform a controlled touchdown | 1 |  |
| **H7.3** | **Manage a tail rotor malfunction in flight and at the hover** |  |  |
| (a) | hover heights and surfaces are selected to maximise options in the event of tail rotor malfunction | 2 |  |
| (b) | tail rotor malfunction is correctly identified | 2 |  |
| (c) | immediate actions in the event of a tail rotor malfunction during flight are performed in accordance with the aircraft flight manual | 2 |  |
| (d) | control of the helicopter is established and a suitable landing area is selected | 2 |  |
| (e) | all emergency checks are performed and a plan is formulated to achieve an approach and landing | 2 |  |
| (f) | emergency radio messages of intentions are transmitted | 2 |  |
| (g) | a controlled emergency landing with a malfunctioning tail rotor is performed | 2 |  |
| (h) | situational awareness is maintained at all times during tail rotor malfunction handling manoeuvres | 2 |  |
| **H7.4** | **Manage a jammed flight control system** |  |  |
| (a) | jammed or malfunctioning flight control system malfunction is correctly identified | 2 |  |
| (b) | control of the helicopter is established and a suitable landing area is selected | 2 |  |
| (c) | all emergency checks are performed and a plan is formulated to achieve an approach and landing | 2 |  |
| (d) | emergency radio messages of intentions are transmitted; | 2 |  |
| (e) | a controlled landing with a jammed flight control is performed | 2 |  |
| (f) | situational awareness is maintained at all times during jammed flight control handling manoeuvres | 2 |  |
| **H7.5** | **Manage a malfunction of a helicopter operating system** |  |  |
| (a) | abnormal situations involving a helicopter system malfunction are correctly identified and confirmed | 2 |  |
| (b) | appropriate emergency procedures are conducted in accordance with the aircraft flight manual while maintaining control of the helicopter flight path | 2 |  |
| (c) | system malfunctions are managed whilst situational awareness is maintained at all times during a system malfunction | 2 |  |
| **H7.6** | **Manage upset recovery (this element is included to cover situations where the pilot has to recover the aircraft to a safe and stable flight condition in visual conditions)** |  |  |
| (a) | apply correct techniques for upset recovery in various configurations as follows: |  |  |
|  | (i) recognise upset condition | 2 |  |
|  | (ii) maintain references by visual cues | 2 |  |
|  | (iii) recover to level flight condition; configure aircraft appropriately | 2 |  |

\*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 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

| 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 |
| --- | --- |
|  |  |