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| **PERSONNEL LICENSING DEPARTMENT**  **CHECKLIST FOR MULTI-CREW PILOT LICENCE COURSE APPROVAL** |
| **Course Title: :**  **Name of Organisation: Date Submitted: .**  ***Signature: (ATO representative)***  **( )**  **Name – Surname** |
| **Official Use Only** |
| **Verification Result:** **🞏 Accept 🞏 Reject** |
| **This compliance check form has been verified by:**  ***Signature: (PEL-ATO Inspector)***  **( )**  **Name – Surname** |
| **Date completed: / / .** |

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| **Instructions**   1. Applicant is to conduct a self-assessment as part of its compliance check by making ‘X’ in either Yes or No column and by providing manual references into the ‘Compliance checked by applicant’.   **‘Yes’** shall be marked if contents/details are given. The applicant shall provide manual reference into the **‘Reference’** column.  **‘No’** shall be marked if contents/details are not given.  **‘N/A’** shall be indicated in the **‘Reference’** column if it does not apply to a particular requirement.   1. For official use: Each checklist item shall be assessed and given a result either **‘Satisfactory-(S)’, ‘Unsatisfactory-(U)’ or ‘N/A’**   **‘Satisfactory’** shall be given if the applicant is able to provide valid contents and details that comply with the requirements.  **‘Unsatisfactory’** shall be given if the applicant is not comply with the requirement.  **‘N/A’** shall be given to indicate when information in a certain table cell is not provided, either it does not apply to a question or because the answer is not available |

| No | Requirements | Compliance Checked by Applicant | | | | | CAAT Officials Use Only | | | | | | |
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| Yes | No | | References | | S | | U | | N/A | | Remarks |
| **The requirements of Notification of the Civil Aviation Authority of Thailand on the Certification of Aviation Training Organization and Courses B.E.2562** | | | | | | | | | | | | | |
|  | Course Title, Course Objective and Course Expectation |  | |  | |  | |  | |  | |  |  |
|  | Trainees’ entry qualification |  | |  | |  | |  | |  | |  |  |
|  | Instructor qualifications |  | |  | |  | |  | |  | |  |  |
|  | Training course outline (structure of theoretical and practical training) |  | |  | |  | |  | |  | |  |  |
|  | Training methods, training materials, documents and equipment |  | |  | |  | |  | |  | |  |  |
|  | Example of certificate |  | |  | |  | |  | |  | |  |  |
|  | Course contents (subjects, topics and learning hours) |  | |  | |  | |  | |  | |  |  |
|  | Syllabus, lesson plan and course management/development |  | |  | |  | |  | |  | |  |  |
|  | Measurement and assessment |  | |  | |  | |  | |  | |  |  |
|  | Course time table, duration and limitation |  | |  | |  | |  | |  | |  |  |
|  | Person responsible for the course |  | |  | |  | |  | |  | |  |  |
|  | Instructor names list with qualification, education and experiences |  | |  | |  | |  | |  | |  |  |
|  | Details of training equipment and facilities i.e. location, airports, routes,  Classrooms, Briefing-area, |  | |  | |  | |  | |  | |  |  |
|  | Aircraft, FSTD, maintenance and relevant equipment/material |  | |  | |  | |  | |  | |  |  |

| No | Requirements | Regulation | Checked by Applicant | CAAT Officials Use Only | | | |
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| References | S | U | N/A | Remarks |
| **The requirements of Regulation of the Civil Aviation Board No. 89 Relating to the Qualifications of Personnel Applicants B.E.2559 (Part 1. Theoretical Knowledge)** | | | | | | | |
| **1. Air law** | | | | | | | |
| 1 | Rules and regulations relevant to the holder of an airline transport pilot licence | RCAB 89 - 3(5)(ค)1 |  |  |  |  |  |
| 2 | Rules of the air | RCAB 89 - 3(5)(ค)1 |  |  |  |  |  |
| 3 | Appropriate air traffic services practices and procedures | RCAB 89 - 3(5)(ค)1 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **2. Aircraft general knowledge for aeroplanes, helicopters and powered-lifts** | | | | | | | |
| 1 | general characteristics and limitations of electrical, hydraulic, pressurization and other aircraft systems; flight control systems, including autopilot and stability augmentation | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
| 2 | principles of operation, handling procedures and operating limitations of aircraft engines; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
| 3 | operating procedures and limitations of the relevant category of aircraft; effects of atmospheric conditions on aircraft performance in accordance with the relevant operational information from the flight manual | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
| 4 | use and serviceability checks of equipment and systems of appropriate aircraft | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
| 5 | flight instruments; compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments and electronic display units | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
| 6 | maintenance procedures for airframes, systems and engines of appropriate aircraft | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
| 7 | for helicopters and powered-lifts, transmission (power trains) where applicable | RCAB 89 - 3(5)(ค)2 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **3. Flight Performance, planning and loading** | | | | | | | |
| 1 | effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations | RCAB 89 - 3(5)(ค)3 |  |  |  |  |  |
| 2 | use and practical application of take-off, landing and other performance data, including procedures for cruise control | RCAB 89 - 3(5)(ค)3 |  |  |  |  |  |
| 3 | pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures | RCAB 89 - 3(5)(ค)3 |  |  |  |  |  |
| 4 | in the case of helicopters and powered-lifts, effects of external loading on handling | RCAB 89 - 3(5)(ค)3 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **4. Human performance** | | | | | | | |
| 1 | human performance including principles of TEM | RCAB 89 - 3(5)(ค)4 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **5. Meteorology** | | | | | | | |
| 1 | interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry | RCAB 89 - 3(5)(ค)5 |  |  |  |  |  |
| 2 | aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions | RCAB 89 - 3(5)(ค)5 |  |  |  |  |  |
| 3 | causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance | RCAB 89 - 3(5)(ค)5 |  |  |  |  |  |
| 4 | in the case of aeroplanes and powered-lifts, practical high-altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jetstreams | RCAB 89 - 3(5)(ค)5 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **6. Navigation** | | | | | | | |
| 1 | air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights | RCAB 89 - 3(5)(ค)6 |  |  |  |  |  |
| 2 | use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft | RCAB 89 - 3(5)(ค)6 |  |  |  |  |  |
| 3 | use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids | RCAB 89 - 3(5)(ค)6 |  |  |  |  |  |
| 4 | principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment | RCAB 89 - 3(5)(ค)6 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **7. Operational procedures** | | | | | | | |
| 1 | application of TEM to operational performance | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
| 2 | interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
| 3 | precautionary and emergency procedures; safety practices | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
| 4 | operational procedures for carriage of freight and dangerous goods | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
| 5 | requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
| 6 | in the case of helicopters, and if applicable, powered-lifts, settling with power; ground resonance; retreating blade stall; dynamic rollover and other operating hazards; safety procedures, associated with flight in VMC | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **8. Principle of flight** | | | | | | | |
| 1 | principles of flight | RCAB 89 - 3(5)(ค)8 |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **9. Radiotelephony** | | | | | | | |
| 1 | communication procedures and phraseology | RCAB 89 - 3(5)(ค)9 |  |  |  |  |  |
| 2 | action to be taken in case of communication failure | RCAB 89 - 3(5)(ค)7 |  |  |  |  |  |
| 3 | In addition to the above subjects, the applicant for an airline transport pilot licence applicable to the aeroplane or powered-lift category shall have met the knowledge requirements for the instrument rating | RCAB 89 - 3(5)(ค) |  |  |  |  |  |
|  |  |  | Total Hours |  |  |  |  |
| **Grand Total Theoretical Hours (750 hours minimum)** | | | | | | | |

| No | Requirements | | (Regulation) - ATO | Checked by Applicant | CAAT Officials Use Only | | | | | | |
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| References | S | | U | | N/A | | Remarks |
| **The requirements of Regulation of the Civil Aviation Board No. 89 Relating to the Qualifications of Personnel Applicants B.E.2559 (Part 2. Practical Training)** | | | | | | | | | | | |
| **Phase 1. Core flying skills (Specific basic single-pilot training in an aeroplane)** | | | | | | | | | | | |
| 1 | Solo (local or/and cross-country) | PF SP SE/ME | (5) - Hours |  | |  | |  | |  |  |
| 2 | Solo VFR cross-country | PF SP SE/ME | (5) - Hours |  | |  | |  | |  |  |
| 3 | Basic instrument flight (if applicable) | PF SP SE/ME | (5) - Hours |  | |  | |  | |  |  |
| 4 | Night flight (if applicable) | PF SP SE/ME | (5) - Hours |  | |  | |  | |  |  |
| 5 | UPRT | PF SP SE/ME | (3) - Hours |  | |  | |  | |  |  |
| 6 | FSTD | FNPT I | (≤5) - Hours |  | |  | |  | |  |  |
|  |  |  |  | Total Hours | |  | |  | |  |  |
| **Phase 2. Basic (Introduction of multi-crew operations and instrument flight)** | | | | | | | | | | | |
| 1 | PF/PM complement | FNPT II + MCC  PF/PM  MCC  SE/ME | - Hours |  | |  | |  | |  |  |
| 2 | IFR cross-country |  | |  | |  | |  |  |
| 3 | Instrument flight |  | |  | |  | |  |  |
| 4 | Night flight |  | |  | |  | |  |  |
|  |  |  |  | Total Hours | |  | |  | |  |  |

| No | Requirements | Regulation | Checked by Applicant | CAAT Officials Use Only | | | |
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| References | S | U | N/A | Remarks |

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| **Phase 3. Intermediate (Application of multi-crew operations to a multi-engine turbine aeroplane certified as a high-performance aeroplane)** | | | | | | | | |
| 1 | Normal procedure  Abnormal procedure  Multi-crew  Instrument flight  Non type specific UPRT  LOFT, TEM and CRM | FFS level B + ATC  PF/PM  Multi-crew certified  ME | - Hours |  |  |  |  |  |
|  |  |  |  | Total Hours |  |  |  |  |
| **Phase 4. Advance (Type rating training within an airline-oriented environment)** | | | | | | | | |
| 1 | Type rating training including:  Normal procedure  Abnormal/Emergency procedure  Type specific UPRT  LOFT, TEM and CRM  All weather  Landing training | FFS level C+ or D  PF/PM  ME  Multi-crew certified | - Hours |  |  |  |  |  |
| 2 | Takeoff/Landing and go-around | Aeroplane  PF/PM  ME  Multi-crew certified | 6-12 & 1 - ( & ) |  |  |  |  |  |
|  |  |  |  | Total Hours |  |  |  |  |
| **Grand Total Practical Hours (240 hours minimum)** | | | | | | | | |

References : Notification of the Civil Aviation Authority of Thailand on the Certification of Aviation Training Organization and Courses B.E.2562

: Regulation of the Civil Aviation Board No. 89 Relating to the Qualifications of Personnel Applicants B.E.2559

: International Civil Aviation Organization, Annex 1 – Personnel Licensing

: International Civil Aviation Organization, Doc 9995 – Manual of Evidence-based Training

Note : SE = Single-engine aeroplane

: ME = Multi-engine aeroplane

: PF = Pilot flying

: PM = Pilot monitoring

: SP = Single-pilot aeroplane

: Multi-crew certified aeroplane = aeroplane require to be operated with co-pilot

: FNPT II + MCC = FNPT II that represent a generic multi turbine-powered aeroplane

: FFS level B + ATC = including ATC environment simulation

: FFS level C+ = with an enhanced daylight visual system