สำนักงานการบินพลเรือนแห่งประเทศไทย
The Civil Aviation Authority of Thailand

Aircraft Maintenance Licence Examination and Practical Assessment Manual

CAAT-PEL-AMEAM

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Approved by

Glot Sanalaksna

Manager of Personnel Licensing Department

0. ADMINISTRATION

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0.2 List of Effective Pages

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0.3 Records of Revision

This version of the Aircraft Maintenance Licence Examination and Practical Assessment Manual is issue no. 04 revision no. 00.

The valid pages are listed in the List of Effective Pages distributed with every revision.

Issue	Revision	Effective Date	Revised By
01	00	21-Nov-2023	Iratrachar A.
02	00	11-June-2024	Iratrachar A.
03	00	12-Jun-2025	Iratrachar A.
04	00	17-Oct-2025	Iratrachar A.

0.4 Revision Highlights

Area of Changed	Amendment Summary
Entire manual	To comply with Regulation of CAAT No.25 regarding the Qualifications and Privileges of Application for Aircraft Maintenance and TCAR PEL Part 66

0.5 Distribution List

Type of Document	Distributed To
Electronic Document	- ASI-PEL-AME - ASI-PEL-ATO - Examination Officers - MTO Examiners - MTO Practical Assessors

0.6 Administration

0.6.1 Control of Manual

A document and records management system (DRMS) has been developed to ensure the full alignment of all records and amendments. The Department Manager should ensure this manual contains legible and accurate information. SMO should ensure that this manual is presented in a format that meets corporate standards and is available in DRMS.

0.6.2 Amendment and Revision

Whenever there is a significant change, a new manual issuance is required. Minor amendments should be issued in the form of revisions, with effective pages being reviewed no later than the effective date. A vertical black line is required on the left-hand side of the page to identify the change in this revision.

Significant changes are extensive revisions necessitating a complete re-issuance when involving significant changes in organisation, responsibility, guidelines, policy or procedures including substantial format change.

Minor changes are affected some contents in provision, the revision can be made to the corresponding page.

Manual custodian should record the details of revision and indicate their name with initial last name in the Records of Revision.

0.6.3 Users' Feedback

All concerned personnel should be familiar with the contents of this manual, at least as these pertain to their duties, and to adhere at all times to the policies, processes and procedures laid down in this manual. Any deviations or feedback shoul7d be reported to Personnel Licensing Department.

0.7 List of Associated Documents

There are some associated documents in the provision of this manual, as listed below:

Document Reference No.	Name of Document	Applicable to
-	-	-

0.8 Definitions and Acronyms

0.8.1 Definitions

Term	*Definition*
Assessment Record-keeping	The process of recording and storing data related to practical assessments, including the results, feedback, and documentation required for compliance with regulations
Assessment Specification	A set of guidelines and procedures used to define the standards, criteria, and methods for conducting practical assessments, including task selection, performance evaluation, and compliance checks.
CAAT: The Civil Aviation Authority of Thailand	The governing body responsible for overseeing civil aviation in Thailand, including personnel licensing and the maintenance of aviation safety standards.
Competencies of the Assessor	The skills, knowledge, and qualifications required for assessors to effectively evaluate candidates during practical assessments. These competencies ensure assessors can accurately assess a candidate's technical skills and ensure the application of safety protocols
Competency-Based Assessment	A method of assessment that evaluates a candidate's practical competence against defined standards and competencies, ensuring that the individual is capable of performing specific tasks required for certification.
Basic License Assessment	The practical and theoretical assessments that evaluate a candidate's ability to perform the fundamental tasks required for an aircraft maintenance license (e.g., AME Basic License). These assessments cover the core areas of aircraft maintenance and ensure compliance with regulatory standards.
MTO:Maintenance Training Organization	A training entity approved by CAAT to provide aircraft maintenance training and certification for aviation personnel.
MTOE: Maintenance Training Organization Exposition	A detailed document submitted by an MTO to CAAT that outlines the MTO's training programs, standards, procedures, and compliance with CAAT regulations.
Oversight	The process by which CAAT monitors and evaluates the compliance of MTOs, assessors, and training programs to ensure they meet required standards and regulations.
Part 147	A section of the Thai Civil Aviation Regulations (TCAR) that governs the approval of Maintenance Training Organizations (MTOs), including the standards for training programs, personnel, and facilities.
Practical Assessment (PA)	A hands-on evaluation that assesses an individual's skills and competence in performing aircraft maintenance tasks in line with the defined standards and regulatory requirements.
Practical Assessment Authorization:	The process of granting approval to an MTO to conduct practical assessments, confirming that the MTO meets the necessary standards and complies with CAAT regulations for assessing candidates' practical maintenance competencies.
Regulatory Compliance	The adherence to applicable national and international aviation regulations and standards. In the context of practical assessments, this ensures that MTOs and assessors follow the requirements set forth by CAAT and ICAO.

Term	*Definition*
Safety Objective	The primary goal of CAAT's oversight is to ensure that practical assessments are conducted in a manner that ensures aviation safety through compliance with relevant standards and regulations.
Surveillance	Ongoing monitoring and review conducted under CAAT's oversight program to ensure that MTOs and assessors continuously adhere to regulatory requirements.
Type Rating.	A certification for an AME, which qualifies them to perform maintenance on specific aircraft types. It is necessary for more complex or specialized aircraft systems
Type Rating Assessment	A specialized assessment designed to evaluate a candidate's ability to maintain and troubleshoot specific aircraft types, ensuring they meet the necessary qualifications for Type Rating certification.
Type Rating Examination and Practical Assessment	A specialized assessment designed to evaluate a candidate's ability to maintain and troubleshoot specific aircraft types, ensuring they meet the necessary qualifications for Type Rating certification.

0.8.2 Acronyms and Abbreviations

Term	*Definition*
CAAT	The Civil Aviation Authority of Thailand
CRS	Certificate of Release to Service
D/R	Disassembly/Reassembly
EAM	Examiner and Assessor Management Manual
FCL	Flight Crew Licensing
FOT	Functional/Operational Test
INS	Inspection
MEL	Minimum Equipment List
MTO	Maintenance Training Organization
MTOE	Maintenance Training Organization Exposition
PA	Practical Assessment
R/I	Removal and Installation
SGH	Servicing/Ground Handling
SMEs	Subject Matter Experts
T/E	Tools/Equipment
TS	Troubleshooting
ICAO	International Civil Aviation Organization
TCAR	Thai Civil Aviation Regulations

1. OBJECTIVE AND APPLICABILITY

1.1 Objective

The purpose of this manual is to establish the standards, procedures, and guidance for the conduct, management, and oversight of Aircraft Maintenance Licence (AML) Practical Assessments in accordance with TCAR PEL Part 66 and Part 147. It provides a structured framework for authorising Maintenance Training Organisations (MTOs) and Practical Assessors (PAs) to ensure that all assessments are conducted in a fair, consistent, and standardised manner.

The manual aims to ensure that the competence of maintenance personnel is evaluated against clear and measurable criteria that reflect the safety, regulatory, and performance requirements established by the Civil Aviation Authority of Thailand (CAAT), with reference to internationally recognised competency frameworks and global practices defined by ICAO

1.2 Applicability

This manual applies to:

- **CAAT inspectors (ASI-PEL-AME)** responsible for the approval, authorisation, and oversight of MTOs and Practical Assessors.
- **Approved MTOs** authorised under TCAR Part 147 that are conducting basic licence and type rating practical assessments.
- **Practical Assessors (PAs)** who are nominated by MTOs and authorised by CAAT to perform AML practical assessments in accordance with approved assessment specifications.
  It serves as the primary reference for both CAAT and industry personnel in maintaining uniform implementation of practical assessment standards and ensuring continued compliance with TCAR Part 66.

1.3 Reference

1.3.1 Legal and Regulatory Authority

- Civil Aviation Authority of Thailand Act B.E. 2558 (2015)
- CAAT Regulation No. 25 – Personnel Licensing and Certification
- TCAR PEL Part 66 – Aircraft Maintenance Licensing
- TCAR PEL Part 147 – Maintenance Training Organisations

1.3.2 ICAO Standards

- ICAO Annex 1 – Personnel Licensing
- ICAO Doc 10098 – Competency-Based Training and Assessment for Aircraft Maintenance Personnel
- ICAO Doc 9868 – Procedures for Air Navigation Services: Training (PANS-TRG)

1.3.3 CAAT Manuals

- CAAT Examiner and Assessor Management Manual (EAM) – Higher-level policy governing the management, authorisation, and oversight of examiners and assessors.
- CAAT Aviation Enforcement Manual (CAAT-LEG-ENF) – Procedures for regulatory enforcement and compliance action.

1.3.4 Other Relevant Documents

- Bottom of Form
- MTOE (Maintenance Training Organization Exposition)
- Approved Assessment Specification

2. Basic Practical Assessment

2.1 Introduction

2.1.1 Oral Examination

The Oral Examination is an interactive questioning session intended to assess the candidate's theoretical knowledge, understanding of maintenance procedures, aircraft systems, troubleshooting strategies, and safety protocols. The oral examination tests how a candidate can articulate theoretical concepts in a practical context, justify decisions, and apply knowledge to maintenance tasks. A qualified practical assessor conducts the oral examination — either during or following the practical tasks — using structured questions to validate understanding of:

- Aircraft systems and maintenance procedures
- Fault isolation methods and troubleshooting
- Use and interpretation of maintenance documentation and technical data
- Safety principles and human factors in maintenance

Assessors evaluate the responses for accuracy, depth, justification of decisions, and awareness of regulatory and safety implications. Responses that support the final competency judgment should be documented (in written form or in a log) for traceability.

2.1.2 Practical Assessment

This component tests the candidate's hands-on ability to execute maintenance tasks under realistic or simulated conditions. It evaluates the candidate's capacity to use tools and equipment correctly, adhere to prescribed safety procedures, and perform tasks in accordance with applicable maintenance standards. The practical assessment demonstrates whether the candidate can apply theoretical knowledge in real-world task execution, including problem-solving, procedural compliance, quality of workmanship, and safe operations.

2.2 Standards for Basic Practical Assessment

2.2.1 Approval and Organization of Practical Assessment

The practical assessment must be conducted under a CAAT-approved Maintenance Training Organization (MTO) authorized by CAAT. The MTO is responsible for ensuring that the assessment environment, equipment, tools, and assessor qualifications comply with CAAT's regulatory requirements and the standards expected of AME practical assessments.

2.2.2 Category and Instruction

The candidate must undertake the assessment in the same licence category for which training was provided. The MTO must ensure that candidates have satisfactorily completed all required training modules, prerequisite task lists, and logbook entries before commencing the practical assessment.

2.2.3 Competency and Assessment Plan

The assessment must include the general competency elements required for the AME licence categories (as per ICAO competency mapping). The assessment plan should be designed so that the candidate is evaluated not only on task execution but also on demonstration of safety awareness, decision-making, communication, procedural compliance, and error control, in addition to technical skills.

2.2.4 Task Selection and Duration

Tasks selected for the practical assessment shall be drawn from the approved task assessment tables (Table 2.1 for Category A, Table 2.2 for Category B). The selected tasks should span multiple subject sections to ensure representative assessment of the candidate's overall competence. The total duration of the assessment must be appropriate relative to the number and complexity of tasks. For example, Category A is typically assessed over two days (approximately 12 hours) as a guideline, while Category B has longer duration benchmarks depending on sub-category.

2.2.5 Competency Demonstration

During the practical assessment, the candidate must convincingly demonstrate not only technical task performance, but also safety practices, proper use of tools, procedural discipline, and quality of work. Assessors must use **observable behaviours (OBs)** mapped to ICAO competencies to guide their evaluation and ensure consistency across candidates.

2.2.6 Tools, Equipment, and Environment

The practical assessment must be conducted in an environment that reflects genuine maintenance conditions, whether on the aircraft, in a workshop, or in a test bay. The MTO must provide calibrated tools, test equipment, reference documentation, and access to systems needed for the tasks. The environment should allow the candidate to operate under conditions similar to real maintenance.

2.2.7 Assessment Conducted by Authorized Assessors

Only assessors authorized by CAAT and designated by the MTO may conduct the practical assessment. Where possible, the assessor should be independent — i.e., not the same person who provided the candidate's training — to reduce bias and increase objectivity.

2.2.8 Pass / Fail Criteria

a) The practical assessment is divided into tasks or subject areas drawn from the task tables. Failure in a critical item may result in failure of that task or subject. If a candidate fails one subject, they need only repeat that subject; however, failure in multiple subjects may lead to failing the entire assessment.

b) If the assessment is to be repeated, previously passed subjects may be reassessed, depending on regulation.

c) A candidate may receive up to three attempts. If after three attempts full compliance is not achieved, further remedial training will be required before reassessment.

2.3 Content of Practical Assessment

2.3.1 AME Category A

For **Category A**, tasks shall be selected from **Table 2.3.1 (Task Assessment: AME Category A)**. The assessor must ensure coverage across a representative set of maintenance domains—such as structural, systems, servicing, inspections, and tool use. The number of tasks should be sufficient to allow a fair assessment of the candidate's competence, with **at least five (5) tasks** selected as a minimum benchmark.

In designing the assessment, the assessor should:

- Choose tasks whose scope and complexity are consistent with Category A licence privileges, balancing routine inspection, component handling, lubrication, documentation, and communication tasks.

- Use **observable behaviours (OBs)** mapped to ICAO competencies (when adopted) as a guideline for evaluating how the candidate performs the tasks. The ICAO General Competency (GC) framework is provided as supportive guidance, not a mandatory standard; MTOs and assessors may adapt or omit the GC mappings depending on aircraft type, operational practice, or regulatory preference.
- Allow flexibility in task choice—where equivalent tasks may be substituted per aircraft type or syllabus—provided that the assessment still tests the candidate's practical ability, safety awareness, procedural discipline, and technical judgement.
- Plan sufficient time and resources—including tools, documentation, and environment—to allow the candidate to perform the tasks under realistic maintenance conditions.

These design practices help maintain consistency, fairness, and alignment with the overall competency-based assessment framework, while preserving flexibility needed for varied aircraft types and operational contexts.

Task Code	Task (Expanded Description)	Part-66 Module Reference	ICAO Competencies (Short Titles)	Observable Behaviours (OBs)
A.01.1	Remove & install wheel assemblies per AMM (jacking, chocking, torque, leak check, securing)	M7.6; M11.6	GC01 Procedures · GC02 Work Mgmt · GC04 Technical Expertise · GC07 Risk Mgmt	Applies safety precautions; follows AMM; handles tools confidently; communicates results
A.02.1	Remove & install brake units, observe hydraulic precautions, perform leak/functional checks, document actions	M7.6; M11.6	GC01 Procedures · GC04 Technical Expertise · GC07 Risk Mgmt	Follows procedure sequence; anticipates hydraulic hazards; verifies before sign-off
A.03.1	Remove & install aircraft batteries, observe polarity, venting, safe handling/disposal, and system checks	M7.11; M11.14	GC01 Procedures · GC02 Work Mgmt · GC04 Technical Expertise · GC07 Risk Mgmt	Observes warnings; handles chemical/hazard safely; works methodically
A.04.1	Identify lubrication points, select proper lubricants, apply per AMM guidance	M7.5; (M11)	GC02 Work Mgmt · GC04 Technical Expertise	Chooses correct lubricant; maintains cleanliness; applies correctly
A.05.1	Inspect control cables — wear, corrosion, fray, tension — and report findings	M7.13; M11.7	GC01 Procedures · GC03 Situational Awareness · GC04 Technical Expertise	Applies tolerances; identifies hazards; documents results clearly
A.06.1	Jack, chock, secure aircraft as required per AMM for maintenance operations	M7.4; M11.6	GC01 Procedures · GC03 Situational Awareness · GC07 Risk Mgmt	Executes jacking / chocking safely; monitors stability; shows awareness of risk

Task Code	Task (Expanded Description)	Part-66 Module Reference	ICAO Competencies (Short Titles)	Observable Behaviours (OBs)
A.07.1	Select, use, and return hand & power tools safely in maintenance tasks	M7.2	GC02 Work Mgmt · GC04 Technical Expertise	Chooses correct tool; uses safely; keeps tools in order
A.08.1	Calibrate and operate precision measuring tools (micrometer, vernier, torque wrench) to inspect components	M7.3	GC01 Procedures · GC04 Technical Expertise	Reads/measures accurately; handles tools responsibly; checks calibration
A.09.1	Access, interpret, and apply AMM, IPC, SRM, diagrams, standards during task	M7.1	GC01 Procedures · GC06 Decision-Making	Locates correct document; interprets symbols & limits; cross-checks data
A.10.1	Perform continuity and insulation tests using multimeter guided by wiring diagrams	M7.7; M13.2	GC03 Situational Awareness · GC04 Technical Expertise	Sets appropriate test parameters; reads/ interprets results; verifies continuity
A.11.1	Remove / install a simple avionics LRU (e.g. VHF) with ESD, connections, and perform test	M7.7; M13.15	GC01 Procedures · GC04 Technical Expertise · GC08 Communication	Applies ESD rules; connects correctly; verifies LRU operation
A.12.1	Complete technical log entries and work cards per CAAT/operator standard	M7.1	GC01 Procedures · GC08 Communication · GC09 Teamwork	Writes clearly; ensures accuracy; signs/stamps properly
A.13.1	Deliver shift handover: tasks done, pending items, safety alerts	M9; M7.1	GC08 Communication · GC09 Teamwork	Provides structured briefing; highlights safety risks; invites questions

2.3.2 AME Category B

For **Category B**, tasks are to be selected from **Table 2.3.2 (Task Assessment: AME Category B)**, ensuring that the combination of tasks covers multiple subject subsections (e.g. structures, systems, wiring, inspection, repair). The assessor should choose tasks whose complexity and scope correspond to the privileges and responsibilities of the B licence being assessed. The following durations are recommended to guide MTO planning:

- **B1.1 & B1.3**: 5 assessment days (30 hours)
- **B1.2, B1.4, B2L, B3**: 3 assessment days (18 hours)
- **B2 (Avionics)**: 4 assessment days (24 hours) plus **1 additional day** in which at least two tasks are selected from **Table 2.4.1 (Cat A)**

Note: "1 assessment day" is defined as a minimum of 6 hours (excluding breaks). These duration values are guidelines; actual assessment times may be adapted as necessary to reflect task complexity, aircraft type, and candidate readiness.

In designing the B-level practical assessment, the assessor shall:

- Ensure balanced coverage across relevant subject areas so the assessment is comprehensive.

- Select tasks that appropriately test candidate judgment, procedural discipline, safety awareness, and technical competence.
- Use **observable behaviours (OBs)** as the basis for evaluation, and optionally incorporate the **ICAO General Competency (GC)** mappings to support consistency in assessment. The ICAO GC framework is offered as a recommended guidance tool—not mandatory. MTOs or assessors may adapt, modify, or omit GC mappings as needed to suit their operational context, regulatory environment, or aircraft type, while preserving the integrity of practical assessment standards.
- Provide adequate tools, documentation, and environmental setup to allow realistic assessment conditions.

Table 2.3.2 – Task Assessment: AME Category B

At least one task from each section (B.01, B.02, …) shall be selected for assessment.

Task Code	Task (Expanded Description)	Part-66 Module Reference	ICAO Competencies (Short Titles)	Observable Behaviours (OBs)
B.01.1	Drill bolt holes to required sizes and verify classes of fit using gauges and tools	M7.6 (K2)	GC01 Procedures · GC04 Technical Expertise	Uses correct drill size; checks fit class; records results accurately
B.01.2	Apply limits for bow, twist, wear on shafts/bearings and inspect with approved methods	M7.6 (K2); M11 (Structures, K2)	GC01 Procedures · GC04 Technical Expertise	Uses gauges methodically; applies inspection criteria; reports clearly
B.02.1	Inspect wiring looms for defects; perform splicing, continuity, insulation, and bonding tests	M7.7 (K3) ; M13.10 (K2–K3)	GC01 Procedures · GC04 Technical Expertise · GC07 Risk Mgmt	Identifies wiring defects; applies EWIS precautions; records results
B.02.2	Remove/insert connector pins; install/test coaxial cables observing precautions	M7.7 (K3) ; M13.10 (K2)	GC01 Procedures · GC04 Technical Expertise	Handles connectors carefully; avoids damage; verifies installation
B.02.3	Identify wire types; apply inspection criteria and damage tolerance limits	M7.7 (K3)	GC01 Procedures · GC04 Technical Expertise	Correctly identifies wire type; applies damage criteria confidently
B.02.4	Apply wiring protection methods (looming, clamps, sleeving, soldering, heat shrink)	M7.7 (K3) ; M13.10 (K2)	GC01 Procedures · GC04 Technical Expertise	Applies neat workmanship; uses soldering safely; maintains protection standards
B.02.5	Perform EWIS installation, inspection, repair, and ensure cleanliness standards	M7.7 (K3) ; M13.10 (K2–K3)	GC01 Procedures · GC04 Technical Expertise · GC07 Risk Mgmt	Installs per AMM; maintains cleanliness; ensures regulatory compliance
B.03.1	Produce riveted joints, apply correct spacing/pitch, use riveting and dimpling tools	M7.8 (K2)	GC01 Procedures · GC04 Technical Expertise	Uses riveting tools safely; spaces rivets correctly; ensures joint quality

Task Code	Task (Expanded Description)	Part-66 Module Reference	ICAO Competencies (Short Titles)	Observable Behaviours (OBs)
B.03.2	Inspect riveted joints for conformity and detect defects	M7.8 (K2)	GC01 Procedures · GC04 Technical Expertise	Applies inspection standards; identifies defects accurately
B.03.3	Mark out, calculate bend allowance, bend/form sheet metal, inspect work	M7.8 (K2)	GC01 Procedures · GC04 Technical Expertise	Marks and bends precisely; applies correct allowances; inspects result
B.03.4	Apply composite bonding, control environment, inspect bonding quality	M7.14 (K2)	GC01 Procedures · GC04 Technical Expertise	Demonstrates correct bonding technique; applies inspection criteria; controls environment
B.04.1	Bend, flare, inspect, test, and install aircraft pipes and hoses (including clamps)	M7.9 (K2)	GC01 Procedures · GC04 Technical Expertise	Performs bending/flare correctly; tests for leaks; secures installation
B.05.1	Inspect, test, service aircraft springs to confirm correct function	M7.10 (K2)	GC01 Procedures · GC04 Technical Expertise	Applies inspection/test procedure; ensures serviceability; documents results
B.06.1	Clean, inspect, and lubricate bearings as required	M7.11 (K2)	GC01 Procedures · GC04 Technical Expertise	Cleans appropriately; applies correct lubrication; checks condition
B.07.1	Inspect gears, backlash, belts, pulleys, chains, screw jacks, levers, push-pull rods	M7.12 (K2)	GC01 Procedures · GC04 Technical Expertise	Inspects diligently; applies tolerances; identifies wear, damage
B.08.1	Inspect swaged end fittings, install and test control cables	M7.13 (K2)	GC01 Procedures · GC04 Technical Expertise	Verifies swage integrity; ensures secure installation; tests functionality
B.08.2	Inspect Bowden cables and flexible control systems	M7.13 (K2)	GC01 Procedures · GC04 Technical Expertise	Inspects cable condition; checks functionality; records findings
B.09.1	Inspect welded and brazed joints for quality and defects	M7.15 (K2)	GC01 Procedures · GC04 Technical Expertise	Identifies weld defects; checks conformity to standards
B.09.2	Inspect soldered joints for acceptable quality and defects	M7.15 (K2)	GC01 Procedures · GC04 Technical Expertise	Detects solder defects; verifies solder quality
B.10.1	Prepare aircraft for weighing and perform weight & balance procedure	M7.16 (K2)	GC01 Procedures · GC04 Technical Expertise	Follows AMM procedure; secures aircraft; records

Task Code	Task (Expanded Description)	Part-66 Module Reference	ICAO Competencies (Short Titles)	Observable Behaviours (OBs)
				measurements accurately
B.11.1	Perform inspections: daily/weekly, MPD / Chapter 4 & 5 tasks	M7.18 (K3) ; M7.19 (K2)	GC01 Procedures · GC04 Technical Expertise · GC07 Risk Mgmt	Performs checks methodically; applies AMM; records findings
B.11.2	Identify types of defects; perform inspection / testing per AMM, SRM, SB, AD	M7.18 (K3)	GC01 Procedures · GC04 Technical Expertise	Recognizes defects; applies correct tests; reports clearly
B.11.3	Perform corrosion removal, assessment, reprotection	M7.18 (K2)	GC01 Procedures · GC04 Technical Expertise	Identifies corrosion; uses approved techniques; protects surfaces
B.11.4	Perform structural repair as per SRM	M7.18 (K2)	GC01 Procedures · GC04 Technical Expertise	Applies repair methods; verifies conformity to standards
B.11.5	Use penetrant inspection techniques (color contrast)	M7.18 (K2)	GC01 Procedures · GC04 Technical Expertise	Applies correct procedure; interprets results; ensures safety
B.11.6	Disassembly / reassembly including lockwiring, torqueing	M7.18 (K2)	GC01 Procedures · GC04 Technical Expertise	Applies correct torque specs; uses proper locking techniques; checks work
B.11.7	Troubleshooting / fault finding for system malfunction	M7.18 (K3)	GC01 Procedures · GC06 Decision-Making · GC07 Risk Mgmt	Uses systematic logic; isolates faults; proposes corrective action
B.11.8	Inspect following abnormal events: lightning, HIRF, heavy landing, turbulence	M7.18 (K2–K3)	GC01 Procedures · GC04 Technical Expertise · GC07 Risk Mgmt	Applies inspection protocol; ensures safety; records results
B.12.1	Service aircraft systems: tyre pressure, fluid/gas refill (hydraulic, oil, oxygen, etc.)	M7.17 (K2)	GC01 Procedures · GC04 Technical Expertise	Performs service tasks safely; uses correct equipment; verifies outcome

2.4 Practical Assessment Procedure & Guidance

1. **Assessment Prompt & Planning**

   Before the assessment begins, the assessor or the MTO must issue a prompt or scenario specifying which task types (using the standard codes: LOC, MEL, FOT, SGH, R/I, TS, INS, DOC, etc.) and which environment (A/C, WS, LB) will be used. This ensures both the assessor and candidate understand the scope and context of the practical tasks.

2. **Pre-Assessment Verification**

   The assessor shall verify the candidate's logbook and training records to confirm that all prerequisite tasks have been completed, signatures obtained, and eligibility conditions met. Any missing prerequisites must be resolved prior to assessment commencement.

3. **Use of the Assessment Form**

   The assessor evaluates candidate performance using an **assessment form** that was explicitly designed by the MTO and approved as part of the **Assessment Specification / Assessment Plan**. The assessment form is the implementation tool of the assessment plan, linking the approved tasks, evaluation criteria, and assessment tools (e.g. checklists, evidence guides) directly to the candidate performance. The form ensures that the evaluation follows what was authorized in the assessment specification, providing consistency, traceability, and auditability.

4. **Oral Probing During Task Execution**

   Where necessary, the assessor may pose short oral questions during task performance to explore the candidate's reasoning, decision-making, and understanding of their actions. These questions support the observation and help confirm competence, without overshadowing the task execution itself.

5. **Observation & Recording of Behaviours**

   During task execution, the assessor observes and records **observable behaviours (OBs)** aligned (optionally) with the ICAO competency framework. These behaviours help distinguish *how* the candidate performs (safety, procedural discipline, error control) in addition to *what* they achieve. Use of the ICAO GC mappings is guidance, not a mandatory requirement; MTOs or assessors may adapt or omit these mappings as needed to suit the aircraft type, regulatory context, or operational practice.

6. **Logistics, Environment & Integrity**

   The assessor must control and coordinate logistics such as tool readiness, access to aircraft or components, scheduling, and minimizing interruptions. The assessment environment should approximate real maintenance conditions as much as practical. The assessor must maintain integrity of the session – no undue influence or assistance should be given.

7. **Adjudication & Reporting**

   After the tasks are completed, the assessor reviews the assessment form, assigns pass/fail or equivalent judgments per task, and records overall assessment results. The assessor signs or stamps the report, and the candidate counter-signs it. All assessment documents are retained in the candidate's training records.

8. **Failure, Retest & Remedial Training**

   If a candidate fails one or more tasks or sections, remedial training must be provided to address deficiencies. Reassessment may be limited to the failed areas (if regulation allows) or require re-assessment of the full set, depending on policy. All attempts, outcomes, and remedial actions must be documented and preserved for audit or review.

3. Type Rating Examination Practical Assessment Standards

3.1 Introduction

The Type Training Examination and Practical Assessment process is designed to evaluate the competence of candidates seeking **Type Rating endorsements** for Aircraft Maintenance Engineers (AMEs). The purpose is to ensure that candidates are able to apply both theoretical knowledge and practical skills to maintain aircraft safely, in compliance with CAAT regulatory requirements and international standards.

The assessment process is structured around three integrated components:

1. Theoretical Examination

This evaluates the candidate's knowledge of aircraft systems, type-specific maintenance procedures, safety protocols, and applicable regulatory requirements. It ensures that candidates have reached the knowledge level required under the approved type training syllabus and TCAR Part 66 Appendix III.

2. Oral Examination

The oral element is embedded into the practical assessment. It is designed to assess the candidate's ability to explain maintenance decisions, describe system operations, and demonstrate troubleshooting logic. Assessors must confirm the candidate's use of documentation and ensure oral responses are technically accurate and relevant to the assessment decision.

3. Practical Assessment

The practical component evaluates the candidate's ability to perform type-specific maintenance tasks in live or simulated conditions. Candidates are required to use appropriate tools and documentation, apply safety procedures, and demonstrate competency in task completion. Practical assessments are carried out under supervision in accordance with Appendix III of TCAR Part 66.

Together, these three elements ensure that AMEs awarded with a type rating endorsement possess the required competence to perform unsupervised maintenance on the relevant aircraft type.

3.2 Standards for Written Examination (Appendix III to TCAR Part 66)

The written examination forms the theoretical component of the type rating assessment and provides assurance that the candidate has achieved the **knowledge objectives** defined in the approved type training syllabus. Unlike the practical assessment, the written examination does not assess observable behaviours or general competencies, but focuses on verifying the candidate's **knowledge comprehension and application**.

3.2.1 Examination Format

- The written examination shall consist of **multiple-choice questions (MCQs)** and **essay-type questions**, aligned with the aircraft type training syllabus.
- Questions must assess both knowledge recall and the ability to apply knowledge to type-specific maintenance scenarios.

3.2.2 Question Quality

- All questions must be technically accurate, unambiguous, and free from unnecessary complexity.
- MCQs must include plausible alternatives that test understanding, not rote memorisation.
- Essay-type questions must require structured, technical explanations with direct relevance to aircraft type maintenance.

3.2.3 Scope and Number of Questions

- The number of questions must be proportionate to the training delivered, with a general guideline of **one question per hour of instruction**.
- Examinations must ensure balanced coverage of the **airframe, systems, powerplant, and avionics** relevant to the aircraft type.

3.2.4 Duration

- The exam duration shall be based on the scope and complexity of the examination.
- As a guideline, **90 seconds per MCQ** should be allocated, with additional time for essay-type questions.

3.2.5 Pass Mark

- The minimum pass mark is **75%**.
- If the examination is divided into sections (e.g. structures, systems, engines), each section must be passed with at least 75%.

3.2.6 Standards Compliance

- The written examination must be conducted in compliance with **Appendix III to TCAR Part 66**.
- Examination questions and administration procedures must be approved by CAAT as part of the type training approval process.

3.3 Practical Training and Assessment Requirements

The **Type Rating Practical Assessment** is designed to verify that candidates possess the **hands-on competence, safety awareness, and decision-making ability** to perform maintenance on a specific aircraft type. It complements the theoretical and oral examinations by ensuring that knowledge is applied correctly in a **live or simulated maintenance environment**.

3.3.1 Training Organization and Approval

- Practical assessments must be conducted only by **CAAT-approved Part 147 Maintenance Training Organizations (MTOs)** authorized for the relevant aircraft type.
- The MTO shall ensure the availability of **suitable facilities, tooling, test equipment, and qualified personnel**.
- The practical assessment plan must be included in the MTO's approved training documentation and subject to CAAT review.

3.3.2 Task Selection and Scope

- Tasks shall represent a **cross-section of maintenance activities** relevant to the aircraft type, ensuring coverage of **airframe, powerplant, avionics, and integrated systems**.
- Selected tasks must include a balance of:
    - **Routine maintenance** (e.g., servicing, lubrication, inspections).
    - **Component removal and installation (R/I)**.
    - **System troubleshooting and fault isolation**.
    - **Functional and operational checks**.
    - **On-wing maintenance tasks** (e.g., in-situ diagnostics, line maintenance scenarios).
- The assessment should avoid repetition and ensure tasks provide **meaningful evidence of competence**.

3.3.3 Compliance with Standards

- Practical assessments must comply with **Appendix III to TCAR Part 66**.
- Assessment methods should reflect the **competency-based principles** described in ICAO Doc 10098, but their application is **encouraged rather than mandatory** until adopted formally by CAAT.
- Where ICAO General Competencies (GCs) are used, they must be referenced as **supporting criteria only**, to enhance assessment consistency without introducing additional regulatory requirements.

3.3.4 Conduct of Practical Assessment

- Assessments shall be conducted under the supervision of a **qualified assessor**, independent from the candidate's initial instruction where possible.
- The candidate shall perform tasks in a **live aircraft environment** or an **approved simulator/mock-up** representative of real maintenance conditions.
- Oral questioning shall be integrated into the task performance to confirm technical reasoning and decision-making.
- Assessors must remain neutral, observing the candidate's work without providing instruction or guidance during the assessment.

3.3.5 Duration and Assessment Day Definition

- The duration of the type rating assessment shall be based on the **complexity of the aircraft type** and the number of representative tasks selected.
- As a guideline, **one assessment day** shall be equivalent to **6 hours of assessment time**, excluding breaks.
- The number of assessment days should be proportional to the training syllabus and consistent with CAAT guidance.

3.3.6 Evidence and Documentation

- Candidate performance must be recorded using an **Assessment Form**, which reflects the approved **Assessment Plan/Specification** submitted by the MTO.
- The assessment form shall capture:
    - Tasks performed.
    - Oral questions asked.
    - Observed behaviours (OBs).
    - Pass/fail decisions with supporting remarks.
- Completed assessment forms form part of the **candidate's training record** and must be retained by the MTO in accordance with CAAT requirements.

3.4 Content of Type Rating Practical Assessment

The **Type Rating Practical Assessment** evaluates the candidate' s ability to perform maintenance on a specific aircraft type under realistic operational conditions. Unlike the Basic Practical Assessment, which is task-by-task prescriptive, the Type Rating Practical Assessment is organized into **assessment areas**. These areas represent a cross-section of typical line and base maintenance activities, ensuring that the candidate demonstrates both **technical competence** and **professional behaviours** aligned with ICAO general competencies.

The assessment is designed to be **flexible**:

- Each MTO may select representative tasks within these areas, tailored to the aircraft type.
- At least one task shall be chosen from each area.
- Tasks must be scenario-based and include opportunities for oral questioning to confirm underlying knowledge.
- The **Training Level** (as defined in Appendix III of Part-66) indicates the expected depth of knowledge and performance standard.

a) Table 3.4.1 – Routine Maintenance Tasks

Candidates must demonstrate competence in performing routine servicing and scheduled checks.

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies (Short Titles)	OBs (Observable Behaviours)
TR.01.1	Perform pre-flight and post-flight inspections, including landing gear, engines, hydraulics, and structure.	L2	GC01 Procedures, GC03 Situational Awareness	Applies inspection checklist; identifies defects; records accurately
TR.01.2	Carry out servicing tasks such as fuel system checks, oil replenishment, and hydraulic servicing.	L2	GC01 Procedures, GC04 Technical Expertise, GC07 Risk Mgmt	Uses servicing equipment safely; applies AMM; maintains cleanliness

b) Table 3.4.2 – Troubleshooting and Diagnostics

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies	OBs
TR.02.1	Diagnose faults in electrical, mechanical, or avionics systems using FIM and AMM.	L3	GC01 Procedures, GC04 Technical Expertise, GC06 Decision-Making	Uses troubleshooting flow; verifies findings logically
TR.02.2	Resolve simulated system malfunctions (e.g. engine failure, hydraulic/electrical faults).	L3	GC01 Procedures, GC07 Risk Mgmt	Applies abnormal checklist; communicates results clearly

c) Table 3.4.3 – Component Removal and Installation (R/I)

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies	OBs
TR.03.1	Remove and install major components (engine, landing gear, avionics unit) per AMM.	L3	GC01 Procedures, GC04 Technical Expertise, GC07 Risk Mgmt	Follows AMM; applies safety precautions; ensures correct installation
TR.03.2	Perform rigging and adjustments of flight controls or landing gear systems.	L3	GC01 Procedures, GC04 Technical Expertise	Demonstrates precision; verifies correct system function

d) Table 3.4.4 – Functional and Operational Testing

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies	OBs
TR.04.1	Conduct functional and operational checks of hydraulic, electrical, and powerplant systems.	L3	GC01 Procedures, GC03 Situational Awareness	Runs test procedure; interprets results accurately
TR.04.2	Perform engine run-up or powerplant functional test under supervision.	L3	GC01 Procedures, GC07 Risk Mgmt	Applies engine run safety precautions; documents outcomes

e) Table 3.4.5 – Use of Specialized Tools and Equipment

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies	OBs
TR.05.1	Use torque wrenches, hydraulic jacks, and lifting/rigging equipment for type-specific tasks.	L2	GC01 Procedures, GC04 Technical Expertise	Uses tools correctly; observes safety precautions
TR.05.2	Operate diagnostic test equipment for avionics and electrical systems.	L3	GC01 Procedures, GC04 Technical Expertise	Reads and interprets test data; ensures conformity

f) Table 3.4.6 – On-Wing Maintenance

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies	OBs
TR.06.1	Perform on-wing maintenance (e.g., engine component change, electrical repairs) without aircraft removal from service.	L3	GC01 Procedures, GC04 Technical Expertise, GC07 Risk Mgmt	Demonstrates adaptability; applies safety procedures
TR.06.2	Conduct in-situ diagnostics and repair for system faults.	L3	GC01 Procedures, GC04 Technical Expertise	Verifies repair effectiveness; documents clearly

g) Table 3.4.7 – Compliance with Maintenance Procedures

Task Code	Task (Expanded Description)	Training Level	ICAO Competencies	OBs
TR.07.1	Complete maintenance documentation (logbooks, work cards, corrective actions).	L2	GC01 Procedures, GC08 Communication	Writes clearly; ensures traceability
TR.07.2	Apply ADs, SBs, and regulatory compliance requirements during maintenance tasks.	L3	GC01 Procedures, GC06 Decision-Making	Identifies mandatory actions; ensures compliance

3.5 Assessment Forms and Records

3.5.1 Use of Assessment Forms

All practical assessments for type rating candidates shall be conducted using **assessment forms** approved by CAAT as part of the **Assessment Specification Form**. The assessment forms are designed to capture the performance of the candidate against the selected assessment areas and tasks, including both technical execution and observable behaviours.

3.5.2 Structure of Assessment Forms

Each form shall:

- Identify the selected assessment area(s) (e.g., Routine Maintenance, Troubleshooting).
- List the task(s) selected by the assessor from the approved training syllabus.
- Define the assessment criteria (safety, technical accuracy, documentation, teamwork).
- Provide space for oral questioning records, where oral responses form part of the competency judgement.
- Include assessor remarks and a clear pass/fail decision.

3.5.3 Application and Conduct

Assessment forms must be used during:

- **Basic Practical Assessments (Chapter 2)**
- **Type Rating Practical Assessments (Chapter 3)**

For type rating, assessors must ensure that at least one task is drawn from each assessment area (see Table 3.5). Assessors must observe the candidate's performance directly and record evidence on the assessment form. Oral questions may be used to verify underpinning knowledge.

3.5.4 Approval and Standardisation

MTOs are responsible for designing assessment forms consistent with their approved **Assessment Specification Form**. CAAT must approve the assessment specification prior to use, ensuring that forms are standardised, clear, and aligned with the training syllabus.

3.5.5 Records and Feedback

Completed forms must be retained as part of the candidate's permanent training record. Copies shall be made available to CAAT on request. Assessors are required to provide feedback to the candidate based on the recorded performance, including corrective actions where needed.

4. QUALIFICATION AND TRAINING

4.1 Introduction

The qualification and training of practical assessors are critical to ensuring that aircraft maintenance personnel are properly evaluated and meet the standards required for certification. This chapter outlines the qualifications, training requirements, and recurrent training intervals for both Basic License Assessors and Type Rating Assessors. These assessors must possess the necessary qualifications, knowledge, and skills to conduct practical assessments effectively, ensuring consistent and high-quality maintenance training.

4.2 Qualifications for Practical Assessors

Practical assessors must meet the following qualification requirements before they are eligible to conduct practical assessments. The requirements differ for Basic License Assessors and Type Rating Assessors, and these differences are outlined below.

4.3 Basic License Assessors

Practical assessors for Basic License assessments must meet the following qualifications:

1. Valid AME License or Equivalent Experience
    - The assessor must have relevant maintenance experience in the aircraft category they are assessing, even if they do not hold an AME license.
2. Experience in Aircraft Maintenance Tasks
    - The assessor must have practical experience in the aircraft systems relevant to the Basic License. This includes experience with basic maintenance tasks such as:
        - Routine inspections
        - Minor repairs and servicing
        - Functional checks on systems such as hydraulics, landing gear, and electrical systems.
3. Regulatory Knowledge
    - The assessor must be familiar with CAAT regulations relevant to the Basic License and understand how to assess basic maintenance tasks according to TCAR Part 66 and ICAO standards.

4.4 Type Rating Assessors

Practical assessors for Type Rating assessments require additional qualifications due to the complexity and specialized nature of the tasks involved. The criteria for Type Rating Assessors are as follows:

1. Type-Specific Qualifications
    - The assessor must hold type-specific qualifications for the aircraft being assessed, including formal training and certification specific to the aircraft type.
2. Experience with Advanced Maintenance Tasks
    - The assessor must have hands-on experience with more advanced tasks for the aircraft type, such as:
        - Engine runs
        - System troubleshooting
        - Component removals/replacements
        - Functional testing

3. Regulatory Knowledge
    - The assessor must have an understanding of CAAT regulations and ICAO standards as they apply to Type Rating assessments, including airworthiness standards, service bulletins, and maintenance procedures specific to the aircraft type.
4. Competency in Advanced Systems
    - The assessor must have technical competence to assess systems that are more complex and specialized, such as:
        - Hydraulics and flight controls
        - Fuel systems and powerplant
        - Avionics systems

4.5 Training Requirements for Practical Assessors

In addition to the qualifications outlined in Section 4.2, practical assessors must undergo specific training courses to ensure they are properly prepared to evaluate candidates. These courses cover both general assessment skills and technical skills tailored to the requirements of Basic License and Type Rating assessments.

4.6 Basic License Assessors Training

A. CAAT Aviation Laws (Specific to Maintenance Activities)
    - To ensure assessors are familiar with CAAT aviation laws relevant to maintenance activities and practical assessments.
B. Roles and Responsibilities of Practical Assessors
    - To ensure assessors understand their roles and responsibilities in the practical assessment process, including the rules and procedures they must follow.
C. Basic Maintenance Competency-Based Assessment
    - To provide assessors with the knowledge and skills to evaluate basic maintenance tasks, including routine inspections, component replacements, and servicing.
D. Safety Management System (SMS)
    - To ensure assessors understand and apply safety protocols and risk management during practical assessments.
E. Human Factors in Maintenance Activities
    - To train assessors to recognize the impact of human factors (e.g., stress, fatigue, and decision-making) on practical maintenance tasks.

4.7 Type Rating Assessors Training

1. CAAT Aviation Laws (Type Rating-Specific)
    - To provide assessors with detailed knowledge of CAAT regulations specific to Type Rating assessments.
2. Roles and Responsibilities of Type Rating Assessors
    - To ensure assessors understand their roles in evaluating advanced maintenance tasks such as engine runs, system checks, and troubleshooting.
3. Competency-Based Assessment for Advanced Maintenance Tasks
    - To train assessors on how to assess competencies for more complex tasks, such as system checks, component replacements, and diagnostic testing.
    -

4.8 Safety Management System (SMS) for Type Rating Tasks

- To ensure assessors are proficient in applying Safety Management practices during Type Rating assessments.

4.9 Assessment Standardization

- To standardize assessment processes, ensuring fairness, consistency, and objectivity in evaluating both Basic License and Type Rating candidates.

4.10 Human Factors in Advanced Aircraft Maintenance

- To train assessors to recognize the influence of human factors on Type Rating maintenance tasks, including decision fatigue and stress management.

4.11 Recurrent Training for Practical Assessors

To ensure that practical assessors remain up-to-date with the latest regulations, procedures, and technological advancements in aircraft maintenance, recurrent training is required at regular intervals.

1. Recurrent Training Interval
   - Practical assessors must undergo recurrent training every 24 months to maintain their qualifications for conducting practical assessments. This interval applies to both Basic License Assessors and Type Rating Assessors.
2. Recurrent Training Duration
   - One full day (6 hours) of recurrent training per year is required. This training should focus on updated regulations, new safety protocols, assessment standardization, and competency-based assessment techniques.
3. Recurrent Training Content
   - Updates on CAAT regulations and ICAO guidelines.
   - Refresher courses on safety management, human factors, and assessment standardization.
   - Hands-on practice for Type Rating Assessors with advanced systems and new technologies related to the aircraft types they assess.

4.12 Competencies of the Assessor

In order to ensure that practical assessments are conducted effectively, consistently, and in compliance with CAAT regulations, it is essential that practical assessors possess the required competencies. These competencies are drawn from the ICAO Competency Framework and adapted to the specific role of an assessor. While many competencies are common to both practical assessors and AMEs (Aircraft Maintenance Engineers), there are additional competencies unique to the role of the assessor. These competencies ensure that the assessor can objectively evaluate the skills and knowledge of candidates during the practical assessment process.

Table: Competencies of the Assessor

Competency Area	Description	Example
Regulatory Understanding	Knowledge of CAAT regulations, ICAO standards, and Part 66 regulations to ensure compliance.	Ensuring the candidate's tasks, like component replacement, are performed in accordance with CAAT standards.
Work Management	Ability to manage resources (time, tools, personnel) during practical assessments.	Ensuring the right tools and resources are available for tasks such as engine removals or system checks.
Situational Awareness	Ability to recognize risks and manage safety during assessments.	Observing a hydraulic system test, identifying potential hazards like tool malfunction or safety hazards.
Technical Expertise	Proficiency in assessing aircraft systems and complex maintenance tasks.	Assessing a candidate's ability to troubleshoot complex aircraft systems, such as an engine failure scenario.
Impartiality & Ethical Conduct	Ensuring fairness and neutrality in the assessment process.	Evaluating two candidates performing routine inspections under the same conditions and judging them on identical standards.
Documentation & Reporting	Ability to accurately document results, feedback, and corrective actions.	Completing an assessment report on a candidate performing component replacement, including feedback and outcome.
Communication Skills	Clear communication and feedback to candidates.	Providing constructive feedback after evaluating a candidate's performance on routine maintenance tasks.
Risk Management	Ability to recognize and manage risks during practical assessments.	Ensuring safety protocols are followed during an engine calibration and handling risk factors associated with the task.

Detailed explanations and examples:

1. Regulatory Understanding

Competency Description:
The assessor must have a thorough understanding of regulations related to aircraft maintenance, specifically CAAT regulations and Part 66 requirements. This knowledge is essential for ensuring that practical assessments are conducted in accordance with the prescribed legal and regulatory framework.

Key Responsibilities:

- Understand and apply CAAT regulations and ICAO standards during practical assessments.
- Ensure that the assessment process complies with regulatory standards, and that the candidate's performance meets the requirements outlined in the MTOE (Maintenance Training Organisation Exposition).

Example:
An assessor must verify that the candidate's work complies with CAAT Part 66, ensuring that tasks such as the replacement of critical components are done according to safety protocols. For instance, when assessing a candidate's ability to replace an aircraft wheel, the assessor must ensure that the process follows the CAAT standards for wheel removal and installation, including safety checks and verification of tool usage.

2. Work Management

Competency Description:

The assessor must manage resources effectively during practical assessments. This includes organizing the assessment process, ensuring that the right tools, materials, and personnel are available, and that the assessment follows an efficient workflow.

Key Responsibilities:

- Organize and prioritize the assessment tasks to ensure smooth and timely evaluations.
- Ensure that time management is adhered to during the practical assessment process.

Example:
An assessor conducting an assessment of a candidate performing a functional check on a hydraulic system must ensure that the tools are readily available, the systems to be checked are correctly set up, and the candidate has a clear understanding of the assessment procedure. The assessor must also ensure that the candidate is given adequate time to complete the task without unnecessary delays while ensuring the workflow is maintained.

3. Situational Awareness

Competency Description:

The assessor must have the ability to assess environmental factors during the assessment and recognize potential risks that may arise. Situational awareness involves the ability to identify issues early, anticipate challenges, and mitigate risks during practical assessments.

Key Responsibilities:

- Monitor the environment for potential safety hazards.
- Recognize when conditions might affect the candidate's ability to perform the task safely or efficiently.

Example:
While assessing a candidate performing an engine run-up, the assessor must be vigilant about potential hazards such as loose equipment, fuel spills, or overheating components. The assessor must ensure that all safety protocols are followed, and that the assessment is conducted in a safe environment to prevent accidents. If the weather is unsuitable for engine testing, the assessor must call for a delay until conditions improve.

4. Technical Expertise

Competency Description:
The assessor must have strong technical knowledge in the area they are assessing, particularly in aircraft systems, components, and maintenance tasks. This competency ensures that the assessor can effectively evaluate the candidate's technical competence in performing maintenance tasks correctly and to the required standards.

Key Responsibilities:

- Evaluate the technical proficiency of the candidate in performing complex maintenance tasks.
- Assess the candidate's ability to apply theoretical knowledge to practical situations.

Example:
In the case of a Type Rating assessment, where the candidate is required to assess the hydraulic system of a complex aircraft, the assessor must have deep knowledge of the aircraft's hydraulic system. The assessor evaluates the candidate's ability to diagnose a hydraulic system failure and perform the appropriate corrective actions, including troubleshooting steps and system checks.

5. Impartiality and Ethical Conduct

Competency Description:
The assessor must be able to conduct assessments in a fair and impartial manner, ensuring that no bias influences their judgment. The assessor must maintain professionalism and adhere to ethical standards, providing a neutral and objective evaluation of the candidate's performance.

Key Responsibilities:

- Treat all candidates equally, providing them with the same opportunity to demonstrate their skills and knowledge.
- Maintain a neutral stance during the assessment, ensuring the results reflect the candidate's performance rather than personal opinions or preferences.

Example:
If an assessor is observing a candidate replace a fuel pump, they must ensure that all candidates are subject to the same conditions and evaluation criteria. If two candidates perform the same task, they should receive the same assessment criteria and be held to the same standards, regardless of their background or personal characteristics.

6. Documentation and Reporting

Competency Description:
The assessor must accurately document the assessment results, providing detailed feedback and ensuring that all records are in compliance with CAAT regulations. This includes correctly documenting the results of practical assessments, feedback for candidates, and any necessary corrective actions.

Key Responsibilities:

- Document the assessment results clearly, ensuring accuracy and compliance with CAAT and MTO standards.
- Provide constructive feedback that helps candidates understand where they need improvement.

Example:
After assessing a candidate's ability to perform a component replacement, the assessor must document the task completion, whether the candidate passed or failed, and provide specific feedback on areas that require improvement. If the candidate fails, the assessor must note the reasons for failure and outline any remedial actions needed.

4.13 Differences for Evaluating Assessors for Different Types of Practical Assessments

The competencies for assessing Basic License and Type Rating candidates differ due to the complexity of the tasks involved. CAAT will evaluate nominated practical assessors based on the type of assessment they are conducting, ensuring that they have the appropriate competencies for the specific assessment type.

7. **Type Rating Assessor Competencies:**
   - Must have advanced knowledge of specific aircraft type regulations, systems, and operations.
   - Task Evaluation: Must be able to assess high-level tasks, such as engine removals, system calibrations, and high-performance troubleshooting.
   - Risk Management: Must be capable of evaluating risks associated with complex systems and ensure the safety of the Type Rating assessment process.
8. **Basic License Assessor Competencies:**
   - General knowledge of Part 66 and ICAO regulations for basic maintenance tasks.
   - Must focus on routine maintenance tasks such as component replacements, inspections, and basic troubleshooting.
   - Task Evaluation: The focus is on ensuring candidates can competently perform standard maintenance tasks in accordance with the basic principles of aircraft maintenance.

4.14 Differences for Evaluating Assessors for Different Types of Practical Assessments

CAAT recognizes that the competencies required for assessing Basic License and Type Rating candidates differ. As such, Phase 4 will assess the nominated practical assessors based on the type of practical assessments they are conducting. The assessor must meet the specific competency standards depending on whether they are conducting Basic License assessments or Type Rating assessments.

1. **Type Rating Assessor Competencies:**
   - The Type Rating Assessor must have in-depth knowledge of aircraft-specific regulations, systems, and operations.
   - They must be capable of assessing complex tasks such as engine removals, system calibrations, and troubleshooting on specific aircraft types.
2. **Basic License Assessor Competencies:**
   - The Basic License Assessor must have general technical competence in basic aircraft maintenance tasks and focus on routine procedures, such as component replacements, routine inspections, and basic troubleshooting.

4.15 Outcome of Assessor Evaluation

After the evaluation of the nominated practical assessors, CAAT will determine whether they are authorized to conduct practical assessments for Basic License or Type Rating candidates. The possible outcomes of the assessor evaluation include:

1. Authorization:
    - If the assessor meets all competency standards and regulatory requirements, CAAT will authorize the assessor to conduct practical assessments for the relevant training program.
2. Conditional Authorization:
    - If the assessor demonstrates minor gaps in competency, CAAT may grant conditional authorization, with conditions such as additional training or mentoring to address the gaps.
3. Rejection:
    - If the assessor does not meet the required competency standards or fails to demonstrate the necessary skills, CAAT may reject the assessor's nomination and may request further training or re-nomination of a more qualified assessor.

4.16 Feedback to the MTO

Following the assessor evaluation, CAAT will provide feedback to the MTO regarding the performance of the nominated practical assessors. This feedback will include:

- Assessment of Assessor Performance: Detailed feedback on the assessor's competencies in conducting practical assessments.
- Recommendations for Improvement: If any areas for improvement are identified, CAAT will provide recommendations, such as further training or mentorship for the assessor.

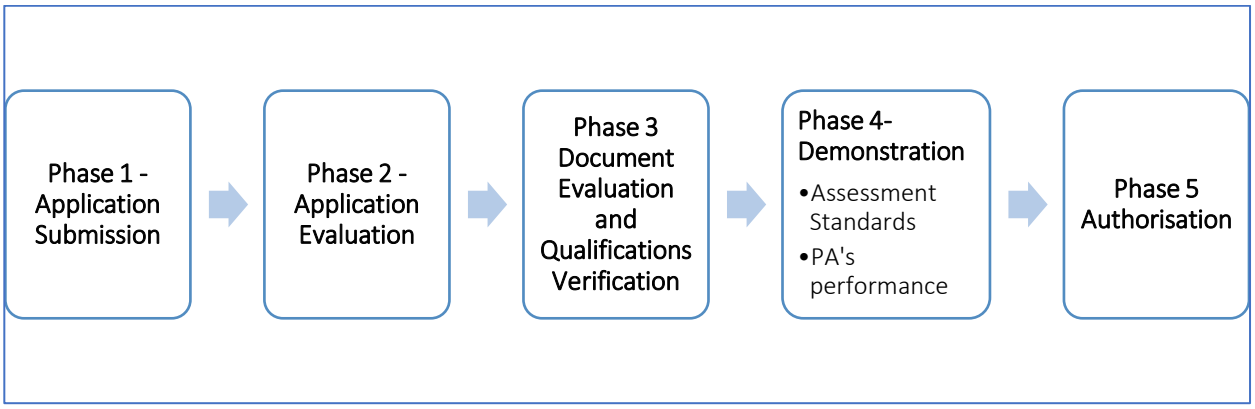
5. GRANTING AUTHORISATION TO MTO

5.1 Overview

This chapter outlines the 5-phase authorisation process for MTOs (Maintenance Training Organisations) wishing to be authorised to conduct practical assessments for both Basic License Practical Assessment and Type Rating Assessment under CAAT regulations. The process ensures that MTOs meet the necessary regulatory, operational, and safety standards to conduct valid assessments.

5.2 Five-Phase Authorisation Process

The 5-phase process ensures that MTOs seeking authorisation to conduct practical assessments meet all regulatory, operational, and safety standards set forth by CAAT and approved details in the MTOE. Each phase is designed to assess specific requirements and ensure the MTO is fully capable of conducting assessments effectively.



5.3 Phase 1: Application Submission

5.3.1 Objective of Phase 1: Application Submission

The objective of this phase is to ensure that the Maintenance Training Organisation (MTO) submits a complete application package demonstrating readiness for CAAT evaluation. The submission must provide sufficient evidence that the MTO, its nominated Practical Assessors (PAs), and supporting resources meet the requirements of CAAT Part-147 and TCAR Part 66.
CAAT will confirm that all documentation is complete and that the MTO has nominated suitably qualified PAs before progressing to Phase 2.

5.3.2 Documents Required for Submission

The following documents must be submitted by the MTO when applying for authorisation to conduct practical assessments. The documentation must clearly indicate whether the application covers Basic Licence or Type Rating assessments.

Document Type	Basic Licence Practical Assessment	Type Rating Assessment
Copy of CAAT Part-147 Approval Certificate	Current CAAT Part-147 approval certificate confirming that the MTO is authorised to deliver Basic Licence training and eligible to apply for practical assessment authorisation.	Current CAAT Part-147 approval certificate confirming that the MTO is authorised to deliver Type Rating training and eligible to apply for practical assessment authorisation.
Assessment Specification Form (ASF)	Completed ASF detailing assessment tasks, assessment forms, competency checklists and methods used to evaluate candidate performance. The ASF must include the MTO's conflict-of-interest policy, scoring criteria, and reporting procedures. Profiles and qualifications of all nominated PAs must be attached as part of this submission.	Completed ASF detailing type-specific tasks and assessment procedures used during Type Rating training. The ASF must include type-specific PA profiles and qualifications relevant to the aircraft type.
Qualifications and Training Records of Practical Assessors	Qualifications and training records for each nominated PA demonstrating compliance with CAAT qualification requirements for Basic Licence assessors. The MTO must nominate and justify the selection of each PA within the ASF.	Qualifications and training records for each nominated PA showing type-specific qualifications and experience for Type Rating assessments. The MTO must nominate and justify the selection of each PA within the ASF.
Facilities Documentation	Description of facilities (workshops, labs, tools, and equipment) intended for use in Basic Licence Practical Assessments.	Description of facilities (hangars, aircraft systems, specialised tools, and test equipment) intended for use in Type Rating Practical Assessments.

5.3.3 Application Submission Method

The MTO must submit its application and supporting documents to CAAT by one of the following methods:

- **Email Submission (preferred):** All application materials must be submitted as PDF files to the official PEL Examination Division email (**pel_ex@caat.or.th**).
- **Hard-Copy Submission:** If electronic submission is not possible, documents must be submitted in hard copy to CAAT's office. Each document must be signed and stamped by the MTO's authorised representative.
- **Official Correspondence:** CAAT may issue acknowledgement letters or requests for additional information via email or formal letter communication channels.

5.3.4 Deadline for Submission

- **Advance Submission:** Applications should be submitted at least **three (3) months** before the intended start of practical assessment activities to allow adequate time for CAAT evaluation.
- **Response to CAAT Requests:** Any request for clarification or additional information must be responded to within **fifteen (15) working days** from CAAT's notification date. Failure to respond within the specified period may delay the authorisation process.

5.4 Phase 2: Application Evaluation

5.4.1 Documents Review

In Phase 2, CAAT reviews the application submitted under Phase 1 to ensure completeness and accuracy before proceeding to detailed evaluation. This includes verifying that the MTO has submitted all required documents and that each document meets the format, content, and authenticity requirements prescribed by CAAT.

The documents expected for review are:

- **Copy of CAAT Part-147 Approval Certificate:** Confirms the MTO is authorised to deliver training under Part-147 and eligible to apply for practical assessment authorisation.
- **Assessment Specification Form (ASF):** Verifies the MTO's assessment plan, tasks, forms, and scoring methods; includes the MTO's conflict-of-interest policy and details of nominated Practical Assessors (PAs).
- **Qualifications and Training Records of Practical Assessors:** Used to cross-check the information declared in the ASF and confirm that each nominated PA meets CAAT's qualification criteria.
- **Facilities Documentation:** Describes the location, equipment, and environment where the practical assessments will be conducted to ensure they are adequate and compliant with CAAT requirements.

5.4.2 Checking for Completeness

CAAT will verify that all required documents are submitted in full and properly formatted. The review includes:

- **Document Completeness:** All items listed in Phase 1 must be present. Any missing document will be identified and recorded for follow-up.
- **Legibility and Format:** All documents must be legible, signed, and stamped by the MTO's authorised representative. Electronic copies must be in PDF format.
- **Accuracy and Consistency:** Information across the ASF, PA profiles, and supporting documents must be consistent (e.g., names, qualifications, aircraft types).
- **Regulatory Compliance:** CAAT verifies that the MTO's Part-147 approval scope corresponds to the requested authorisation for practical assessment (Basic Licence or Type Rating).
- **Nomination of Qualified PAs:** The ASF must identify and justify each nominated PA for CAAT evaluation. Any missing nomination will render the submission incomplete.

5.4.3 Request for Additional Information

If any document is missing or requires clarification, CAAT will formally notify the MTO by **email** or **official letter** from the PEL Examination Division (**pel_ex@caat.or.th**). The MTO must respond with the requested information within **fifteen (15) working days** from the date of CAAT's notification. Failure to respond within the specified timeframe may result in delays or suspension of the evaluation process.

5.4.4 Outcome of Application Evaluation

Upon completing the review, CAAT will issue a formal notification to the MTO by email or letter indicating one of the following outcomes:

1. **Application Complete and Compliant:** The submission is accepted for Phase 3 (Document Review and PA Qualification Verification).
2. **Request for Correction or Missing Information:** CAAT identifies deficiencies and requests the MTO to provide corrections or supplementary documents before proceeding further.

5.4.5 Objective of Phase 2: Application Evaluation

The objective of Phase 2 is to confirm that the MTO has submitted a complete and accurate application package that meets the minimum requirements for further evaluation. This phase ensures that CAAT only proceeds with organisations that demonstrate readiness and regulatory compliance.

5.5 Phase 3: Document Review & Assessor Qualifications Verification

5.5.1 Assessment Specification Review

In Phase 3, CAAT conducts a detailed review of the **Assessment Specification Form (ASF)** submitted by the MTO. The ASF serves as the **primary framework** governing how practical assessments will be conducted and evaluated. It consolidates all key elements—including task design, assessment methods, PA qualifications, and supporting documentation—ensuring that assessments are consistent with CAAT regulations, TCAR PEL Part 66 (Appendix III), and relevant guidance material such as ICAO Doc 10098.

The ASF must contain the following elements, clearly presented and referenced to the MTOE where applicable:

a) General Information and Conflict of Interest Policy

- MTO name, approval reference and issue date
- Date of submission and contact details
- Conflict-of-interest management policy detailing how the MTO ensures independence of assessors in accordance with Chapter 3 of the Examiner and Assessor Management Manual (EAM).
- Confirmation that nominated assessors did not deliver training for the same candidates being assessed, except where approved by CAAT under controlled conditions.

b) Assessment Tasks and Scope

- Comprehensive list of tasks selected for assessment based on the applicable category (Basic or Type Rating).
- Description of task objectives and expected competence outcomes aligned with Part 66 Appendix III.
- Estimated duration for each task and total assessment time.
- Reference to MTOE sections where training and assessment coverage is documented.

c) Assessment Procedures

- Step-by-step procedure from candidate briefing to final reporting.
- Conditions and resources required for each task (e.g. aircraft availability, mock-ups, special tools).
- Safety requirements and operational constraints to be observed during the assessment.

- Specification of assessment forms and rating methods used (e.g. checklists, scoring criteria, observation records).

d) Assessor Details and Qualifications

- Full profiles of each nominated Practical Assessor (PA), including:
- Name, licence number (if applicable), and employer
- Category and/or type endorsement relevant to the assessment
- Training records showing completion of CAAT-approved Assessor Training and any recurrent courses
- Summary of recent experience and competency maintenance activities
- Each profile must be signed by the MTO Quality Manager and referenced in the ASF for CAAT verification.

e) Assessment Tools and Equipment

- List of tools, test equipment and materials to be used for assessment, with confirmation of serviceability and calibration status.
- Cross-reference to MTOE sections governing equipment control and safety compliance.

f) Scoring and Evaluation Methodology

- Description of assessment criteria and scoring system used to determine competence.
- Definition of pass/fail thresholds and expected behavioural outcomes.
- Explanation of how observation records and oral responses contribute to final competence judgement.
- Reference to applicable assessment forms (e.g. competency checklist or grading form).

g) Safety and Compliance

- Details of safety precautions and emergency procedures during assessments.
- Confirmation that the assessment environment complies with Part 147 facilities standards and CAAT safety requirements.

h) Documentation and Record-Keeping

- Procedures for recording, retaining and submitting assessment results to CAAT.
- Storage and security controls for completed assessment forms and related records.
- Process for providing feedback to candidates and internal quality review.

5.5.2 Cross-Reference to Approved MTOE

CAAT will verify that the ASF is fully aligned with the MTOE in the following areas:

- **Task and Competency Alignment:** Tasks in the ASF must match the MTOE's training objectives and competency requirements.
- **Procedural Consistency:** The assessment sequence and record-keeping methods must conform to MTOE Section 3 (Training Procedures) and Section 5 (Quality System).
- **Facilities and Equipment:** Resources listed in the ASF must correspond to those approved in the MTOE.
- **Quality Assurance:** Internal audit and continuous improvement processes must reflect the same oversight approach as the MTOE Quality Manual.

5.5.3 Practical Assessor Qualification Verification

Following the ASF review, CAAT will verify that all nominated PAs meet the minimum qualification standards for the applicable assessment scope.

For Basic Licence Assessments:

- Possession of relevant technical background and experience in the applicable aircraft maintenance category (A or B).
- Completion of CAAT-approved Assessor Training covering assessment principles, competency-based evaluation, and reporting methods.
- Current employment under the Part 147 MTO that applied for authorisation.

For Type Rating Assessments:

- Holding of the appropriate Type Rating endorsement on AME licence or equivalent qualification.
- Demonstrated experience on the specific aircraft type within the preceding 24 months.
- Completion of Assessor Training and Type-Specific Familiarisation as approved by CAAT.

All PA profiles must be verified against supporting certificates and training records attached to the ASF. If any qualification is unclear or insufficient, CAAT will issue a formal request for clarification to the MTO via email or official letter.

5.5.4 Outcome of Document Review and Assessor Verification

Upon completion of the review, CAAT will determine one of the following outcomes:

1. **Accepted for Demonstration (Phase 4):** All requirements met; CAAT schedules a demonstration and evaluation of practical assessors.
2. **Conditional Acceptance:** Minor corrections required before Phase 4; MTO must submit amendments within fifteen (15) working days.
3. **Returned for Correction:** Major deficiencies found; CAAT requests a revised ASF and/or additional PA documentation before further review

5.6 Phase 4: Demonstration – Practical Assessor Evaluation and Standards Compliance

This phase serves as a key stage where CAAT evaluates the MTO's practical assessment system and verifies the performance of the nominated Practical Assessors (PAs). It combines two objectives: confirming that the MTO's procedures align with the approved assessment specification and ensuring that the assessors demonstrate the competence and impartiality required to conduct assessments to CAAT standards.

The demonstration may be conducted on-site, virtually, or through documentary review depending on the MTO's location, scope of authorisation, and the risk level determined by CAAT.

5.6.1 Demonstration: Practical Assessor Evaluation

CAAT evaluates the performance of the nominated Practical Assessors as they conduct or simulate practical assessments within the MTO. The evaluation focuses on confirming that the assessors apply the approved assessment standards consistently and objectively.

1. Performance in Conducting Practical Assessments

CAAT observes or reviews the assessor's performance to verify competence in:

- Evaluating candidates' technical skills and behaviours against the approved assessment form and criteria.
- Following the assessment process as defined in the approved Assessment Specification.
- Applying correct evaluation standards and ensuring safety during the assessment.
- Communicating effectively and professionally with candidates.

2. Assessment Specification Adherence

CAAT ensures that assessments are conducted in accordance with the approved Assessment Specification and MTOE, verifying that:

- Tasks selected align with the approved scope of authorisation.
- Evaluation criteria are applied consistently and fairly.
- Documentation and scoring methods reflect the approved procedures.

3. Impartiality and Objectivity

CAAT assesses the impartiality and objectivity of the Practical Assessors to ensure there is no conflict of interest. All candidates must be evaluated fairly and without bias, in accordance with Chapter 3 of the Examiner and Assessor Management Manual (EAM).

4. Documentation and Reporting

CAAT verifies that Practical Assessors accurately document and report assessment results, provide feedback to candidates where applicable, and maintain clear, traceable records for each assessment.

5. Method of Demonstration

CAAT may determine the most appropriate method for conducting the demonstration based on risk, practicality, and location.

- **On-Site Observation:** Conducted at the MTO facility where CAAT directly observes the assessment.
- **Remote or Documentary Evaluation:** Conducted via live video observation, recorded sessions, or document review when on-site observation is not feasible (e.g., assessors located outside Thailand).
- **Waiver of Demonstration:** Where the nominated assessors have been previously evaluated by CAAT and the assessment system remains unchanged, CAAT may accept previous records or equivalent evidence in lieu of a new demonstration.

5.6.2 Assessment Standards Compliance

In parallel with assessor evaluation, CAAT examines whether the MTO's practical assessment system complies with applicable standards and regulations.

1. Assessment Structure

CAAT confirms that the practical assessment structure aligns with the approved syllabus and TCAR Part 66 requirements, covering representative maintenance tasks and safety procedures.

2. Tools and Equipment

CAAT verifies that the MTO uses properly maintained, calibrated, and approved tools and equipment during assessments, ensuring they replicate operational conditions.

3. Safety Compliance

CAAT reviews the MTO's implementation of safety procedures, verifying compliance with CAAT and ICAO requirements and ensuring assessors and candidates operate within safe limits.

4. Evaluation Criteria

CAAT ensures that evaluation criteria are clearly defined, measurable, and consistently applied. This includes reviewing assessment forms, checklists, and documentation used to record candidate performance.

5. Reporting and Certification

CAAT reviews the MTO's system for documenting and reporting assessment results to ensure traceability, secure record-keeping, and compliance with CAAT's documentation requirements.

5.6.3 MTO's Performance During the Demonstration

CAAT evaluates how effectively the MTO manages and integrates its practical assessment system into its overall training programme.

1. Compliance with Approved Procedures

CAAT assesses whether the MTO adheres to its approved procedures, including assessor nomination, assessment planning, and feedback management.

2. Integration into Training Programme

CAAT verifies that the MTO has properly integrated practical assessments within its training programme to ensure a logical flow from instruction to evaluation.

3. Quality Assurance and Monitoring

CAAT confirms that the MTO has effective internal quality-assurance measures to monitor assessor performance, review assessment results, and ensure continuous improvement.

5.6.4 Compliance Outcome

After completing the demonstration and standards compliance evaluation, CAAT will determine the outcome as follows:

1. Full Compliance

If the MTO and its Practical Assessors demonstrate full compliance with the standards and requirements, CAAT proceeds to Phase 5: Granting of Authorisation.

2. Partial or Non-Compliance

If deficiencies are identified, CAAT issues corrective-action requests. The MTO must address these findings before authorisation is granted. For minor findings, CAAT may accept corrective-action plans; for significant deficiencies, a re-evaluation or follow-up demonstration may be required.

5.7 Phase 5: Granting of Authorisation

5.7.1 Overview

In Phase 5: Granting of Authorisation, CAAT will issue the authorisation letter to the MTO, formally granting the authority to conduct practical assessments. This phase follows Phase 4: Demonstration, where CAAT has verified compliance with both the assessment standards and the practical assessors qualifications. The authorisation letter will outline the scope of assessments the MTO is allowed to conduct, either for Type Rating or Basic License assessments, based on their training approval.

5.7.2 Scope of Authorisation

The scope of authorisation will be determined by the type of training approval granted to the MTO by CAAT. The authorisation will clearly specify the assessments that the MTO is authorized to conduct, including the relevant aircraft types for Type Rating assessments and license categories for Basic License assessments.

1. Type Rating Assessment Authorisation:
   If the MTO is approved for Type Rating training, the scope of practical assessments will be limited to the specific aircraft types they are approved to train. The authorisation letter will specify the aircraft types for which the MTO can conduct Type Rating practical assessments.
2. Basic License Assessment Authorisation:
   If the MTO is approved for Basic License training, the authorisation will be limited to the Basic License practical assessments outlined in the MTO's training approval. The scope will include all the necessary modules and tasks for which the MTO is qualified and authorized to assess candidates.

The authorisation letter will specify the scope of assessments, the aircraft types or license categories, and any limitations on the MTO's authorized assessments.

5.7.3 Issuance of the Authorisation Letter

Once CAAT confirms that the MTO has met all compliance requirements and has successfully completed the evaluation in Phase 4, CAAT will proceed with issuing the authorisation letter. The following steps will be taken:

1. Formal Approval:
   After successful compliance verification, CAAT will issue a formal authorisation letter to the MTO, granting the right to conduct practical assessments.
2. Scope and Limitations:
   The authorisation letter will explicitly outline the scope of the authorisation, detailing the assessments types (Type Rating or Basic License), the aircraft types or license categories, and any limitations that may apply (e.g., limitations based on aircraft types or assessor qualifications).
3. Conditions to Exercise Authorisation:
   The authorisation will be valid only as long as the MTO holds a valid Part-147 approval certificate and the practical assessors are qualified as per the approved assessment specification. The MTO must ensure that the assessors meet CAAT's qualification requirements and are conducting assessments in compliance with the approved standards. If the MTO's Part-147 approval

certificate expires, or the practical assessors do not meet the required qualifications, the authorisation to conduct practical assessments will be suspended or revoked until compliance is restored.

4. Monitoring and Oversight:
   The authorisation letter will also specify that the MTO is subject to regular CAAT surveillance and audits. This ongoing oversight ensures continuous compliance and gives CAAT the authority to perform inspections to verify adherence to the regulatory requirements

5.7.4 Post-Authorisation Responsibilities

Once the authorisation letter is issued, the MTO will have the following responsibilities:

1. Monitoring and Self-Assessment:
   The MTO is responsible for monitoring the quality of practical assessments and ensuring practical assessors perform in accordance with approved standards.

2. Documentation and Reporting:
   The MTO must maintain accurate records of all practical assessments and report the results to CAAT as required. This includes any feedback, task completion, and areas for improvement.

3. Continuous Compliance:
   The MTO must ensure that the practical assessors remain compliant with CAAT's qualifications and continue to meet the approved assessment specifications.

4. Corrective Actions:
   If CAAT identifies any non-compliance during surveillance or audits, the MTO will be required to take corrective actions to restore compliance before resuming practical assessments.

6. Oversight of Authorised MTOs and Practical Assessors (PAS)

6.1 General Oversight Principles

CAAT conducts oversight of authorised Maintenance Training Organisations (MTOs) and Practical Assessors (PAs) to ensure compliance with CAAT Regulations, TCAR Part 66, and relevant CAAT guidance material. Oversight is an integral part of the **CAAT Examiner and Assessor Management Manual (EAM)**, which establishes common policies and processes across all authorised organisations and personnel.

The purpose of oversight is to maintain regulatory compliance and the integrity of the practical-assessment process. Through oversight, CAAT ensures that assessments conducted by MTOs and PAs are fair, standardised, and consistently demonstrate that candidates meet the required competency and safety standards.

Oversight activities comprise both **scheduled surveillance** and **event-based supervision**. Surveillance provides continuous monitoring through audits and performance reviews, while supervision allows CAAT to observe assessments in real time based on MTO notifications, ensuring continuous standardisation and fairness across all assessment events.

The Oversight Programme includes:

- **Surveillance:** Continuous monitoring of practical assessments and related documentation.
- **Audits:** Periodic, in-depth reviews conducted at least annually.
- **Performance Reviews:** Evaluation of MTOs and PAs based on results of assessments, compliance checks, and observed performance trends.

6.2 Oversight Activities for MTOs and PAs

CAAT performs oversight activities to ensure that MTOs and PAs continue to meet the required standards of competence and regulatory compliance. These activities form part of CAAT's annual oversight and audit cycle, as defined in the EAM, and include the following:

Code	Activity	Purpose	Frequency	Applies To	Conducted By
DO	Direct Observation	Observe PA performance in real-time to verify compliance with assessment standards and protocols.	Annually / as determined by risk	MTOs, PAs	ASI-PEL-AME
FA	File Audit	Review MTO assessment records, PA qualifications, training records, and candidate results to ensure proper	Annually	MTOs, PAs	ASI-PEL-AME / ASI-PEL-ATO

Code	Activity	Purpose	Frequency	Applies To	Conducted By
		documentation and compliance.			
TR	Training Verification	Verify that PAs have completed and remain current with required training, including CAAT-approved courses.	Annually	PAs	ASI-PEL-AME / ASI-PEL-ATO
PI	Personnel Interview	Interview candidates who underwent practical assessments to confirm that assessments were carried out according to CAAT requirements.	Triggered by ASP, complaints, or observed trends	MTOs, PAs	ASI-PEL-AME

6.2.1 Supervision of Practical Assessments

Each authorised MTO shall notify CAAT at least **five (5) working days** before conducting any Basic Licence or Type Rating Practical Assessment.

Notifications must include:

- Date, time, and location of the assessment;
- Aircraft type or licence category involved;
- Names of the nominated Practical Assessors; and
- Reference to the approved Assessment Specification Form (ASF).

Upon receiving the notification, CAAT will determine whether to:

- Attend and observe the assessment on-site;
- Conduct remote or sample-based monitoring; or
- Record the event for future oversight sampling.

Supervision may be **announced or unannounced** depending on risk level, past performance, or other circumstances. Failure to provide timely notification may result in suspension of authorisation until compliance is restored.

6.3 Audit Protocol and Execution

The audit protocol for MTOs and PAs follows a structured, evidence-based process to ensure full compliance with CAAT Regulations and TCAR Part 66 standards, consistent with the EAM.

1. Team Composition:
   - ASI-PEL-AME Inspectors.
   - Technical specialists relevant to the aircraft category or maintenance discipline.
2. Notification:
   - CAAT provides at least 48 hours' notice for scheduled audits.
   - Unannounced audits may be conducted when performance concerns arise.
   - Supervision activities are initiated through MTO notification in accordance with § 6.2.1.
3. Conducting the Audit:
   The audit team evaluates the MTO's assessment process end-to-end, ensuring alignment with CAAT requirements, including:
   - Reviewing training and qualification records of PAs.
   - Verifying implementation of approved Assessment Specifications and ASF content.
   - Examining documentation, record-keeping, and feedback procedures.
4. Debriefing:
   Following the audit, CAAT conducts a debriefing session with the MTO and PAs to present findings, clarify issues, and agree on corrective actions.
5. Report and Corrective Action:
   - CAAT issues an audit report summarising findings and required actions.
   - Where non-compliance is identified, the MTO must submit corrective actions within the timeline specified by CAAT.
   - Persistent non-compliance may lead to suspension or revocation of authorisation to conduct practical assessments.

6.4 Reporting and Performance Evaluation

Following completion of oversight and supervision activities, CAAT compiles a comprehensive performance evaluation report covering both organisational and individual assessor performance.

1. Performance Reviews:
   CAAT evaluates MTOs and PAs based on:
   - Training and qualification records of PAs.
   - Quality and completeness of assessment documentation and results.
   - Feedback to candidates and compliance with approved Assessment Specifications.
2. Annual Performance Evaluation:
   Each MTO is subject to an annual performance review based on oversight data, training records, assessment results, and feedback analysis. This review confirms continued compliance with CAAT and Part 66 requirements.
3. Corrective Actions:
   Where deficiencies are identified, CAAT will require corrective actions to be implemented within a specified timeline. Further evaluation or on-site reviews may be scheduled to verify compliance before authorisation is reinstated or renewed.

All oversight outcomes, audit reports, and follow-up actions shall be recorded and managed in accordance with the procedures established in **Chapter 9 of the CAAT Examiner and Assessor Management Manual (EAM)**.

6.5 Documentation and Record Keeping

To ensure transparency and compliance, MTOs must maintain records of all practical assessments conducted, including:

- Assessment reports.
- Training records for PAs.
- Performance feedback and evaluation results.
- Corrective actions taken as a result of audits or reviews.

These records will be reviewed by CAAT during the oversight process to ensure compliance with Part 66 and CAAT regulations.

6.6 Enforcement and Appeal

In line with the CAAT Examiner and Assessor Management Manual (EAM), the following enforcement and appeal procedures apply:

1. Enforcement of Compliance:
   - If non-compliance with CAAT regulations or TCAR Part 66 is identified, CAAT will require the MTO or PA to take corrective actions within a specific time frame.
   - If the corrective actions are not implemented within the stipulated time frame, CAAT may impose sanctions, including suspension or revocation of the MTO's authorisation to conduct practical assessments.
2. Appeal Process:
   - If an MTO or PA disagrees with the findings of the audit or oversight process, they may submit an appeal to CAAT.
   - The appeal will be reviewed by a designated committee that will assess the validity of the findings and determine the next steps.
   - The decision from the appeal committee will be final.

APPENDIX A - ASSESSMENT SPECIFICATION

A. Purpose of the Assessment Specification Form

This form serves as an overview of the **Assessment Specification** to be provided by the Maintenance Training Organisation (MTO). Each item in the specification is a high-level summary, and detailed information may be cross-referenced to the relevant sections of the approved **Maintenance Training Organisation Exposition (MTOE)** or other supporting documents.

This approach enhances efficiency and traceability by **utilising existing approved documents rather than creating new or duplicated material**. Cross-referencing allows the MTO to maintain consistency between the Assessment Specification and its MTOE, ensures configuration control, and reduces administrative workload. It also facilitates CAAT's review and oversight by allowing inspectors to verify compliance directly through referenced MTOE sections.

The MTO must ensure that the Assessment Specification:

- Complies with **CAAT regulations** and **TCAR Part 66/Part 147** requirements.
- Aligns with the **approved training syllabus** and corresponding MTOE procedures.
- Provides sufficient detail or references to demonstrate that the assessment system is fair, consistent, and standardised across all categories of licence or aircraft type.

B. Instructions for Using the Form

1. MTO Response / Reference to MTOE

The MTO should provide a clear and concise response for each checklist item. Wherever possible, responses should **reference the relevant MTOE section, paragraph, or annex** rather than duplicating existing information.

- Example: If the item requests task descriptions or safety procedures, the MTO may indicate *"Refer to MTOE Ch. 5 Sec. 5.3 Task Description – B1/B2 Practical Assessment."*
- Where no MTOE reference exists, the MTO should include the information directly in this form or attach supporting documentation (e.g., assessment plan, task sheet, or training matrix). This ensures all assessment-related materials remain traceable under the MTO's approved documentation system.

2. CAAT Inspector Evaluation

The CAAT inspector shall review the MTO's response against the applicable regulatory and procedural requirements. When cross-references to the MTOE are provided, the inspector will verify that the referenced sections are current, properly approved, and clearly demonstrate compliance with CAAT requirements and TCAR Part 66/147 standards.
The inspector should mark each item as **Compliant / Partially Compliant / Non-Compliant**, as appropriate, and may record any observations on alignment or adequacy.

3. Feedback / Comments

This column is reserved for the CAAT inspector's remarks, clarifications, or required corrective actions. Where deficiencies are identified, the inspector should specify the corrective action expected and, if necessary, request an amendment to the corresponding MTOE section to maintain consistency with the approved assessment specification.

C. SAMPLE of the Assessment Specification Form

Item	Description / Details:	MTOE Reference(s):	Guidance for Review:	Evaluation:	Comments:
Conflict of Interest Management	Identify the MTOE section defining the organisation's COI policy (e.g., MTOE 1.9.3). Describe how it is implemented to ensure assessor independence and include signed declarations as applicable.		Confirm that COI control measures are established, implemented, and documented to prevent assessors from evaluating their own trainees.		
Assessment Process / Procedure	Provide an overview of the assessment process, including planning, conduct, evidence collection, decision-making, and documentation steps.		Ensure the assessment process is clearly defined, systematic, and aligned with the approved training syllabus and competency framework.		
Performance Criteria / Pass-Fail Conditions	Define how candidate performance is evaluated and the conditions for determining pass or fail outcomes.		Confirm that assessment criteria are objective, measurable, and consistent with CAAT Part 66 competency standards and MTO procedures.		
Assessment Environment	Specify the facilities, aircraft, simulators, or mock-ups to be used for the assessment.		Verify that the environment and resources are suitable, safe, and within the MTO's approved scope.		

Tools and Equipment	List the tools, equipment, and materials required for the assessment, including calibration and safety status.		Confirm adequacy, availability, and calibration validity of equipment used in the assessment.		
Safety Protocols	Outline applicable safety procedures (use of PPE, hazard control, emergency procedures) during the assessment.		Ensure safety protocols meet CAAT standards and are effectively communicated to assessors and candidates.		
Documentation and Reporting	Describe how assessment results are recorded, stored, and reported to CAAT. Forms and records should align with the approved specification.		Verify that documentation procedures ensure traceability, secure record retention, and timely reporting to CAAT.		
Quality Assurance and Internal Review	Explain how the MTO monitors and reviews the effectiveness of its assessment system (QA checks, internal audits, assessor performance review).		Confirm QA includes periodic review of assessment outcomes and assessor performance, with corrective actions implemented as necessary.		

APPENDIX B - EXAMPLE OF BASIC PRACTICAL ASSESSMENT DOCUMENTS

A. Assessment Prompt

Subject	1. Application of Fits and Clearances
Task	1.1 Drill required sizes for bolt holes and check the appropriate classes of fits.
Task Type	T/E, INS
Environmental Site	Workshop
AML Category	B1.1
Reference/Standard:	ATA Chapter xx Module 7 of the Part 66 Syllabus
General Competency	1. Application of procedures – GC 01 2. Work management – GC 02 3. Situational awareness – GC 03 4. Technical expertise – GC 04
Performance Standards and Conditions	The candidate will: • Select appropriate measurement tools to support the completion of the task. • Apply the knowledge in Module 7.xx to complete this task. • The task meets the reference standard(s) and was completed within the time limit. *More details may be provided to assist the PA when grading this assessment.* • Comply with applicable safety precautions to prevent harm to personnel and safety.
Grading Instructions:	To assess the candidate, please mark an 'X' in either the 'NC' or 'C' column for two sections: required general competencies and performance. Mark 'NC' if the candidate is unable to demonstrate the required general competencies, and mark 'C' if they can. In the Task Section, mark 'NC' if the candidate does not meet the performance standards and conditions, and mark 'C' if they do.
Duration (mins)	X minutes

B. Practical Assessment Grading Form

Assessment Grading Form				
AML Category	B1.1			
Subject	1. Application of Fits and Clearances			
	1.1 Ability to drill required sizes for bolt holes and check the appropriate classes of fits.			
Environmental Site	Workshop			
No.	General Competencies	NC	C	PA Signature or Stamp
1	Application of procedures – GC 01			
2	Work management – GC 02			
3	Situational awareness – GC 03			
4	Technical expertise – GC 04			
No.	Task	NC	C	PA Signature or Stamp
1	Select a measuring tool correctly			
2	Use a measuring tool to take the required measurements in complete compliance with the performance standards			
Comments:				
Date of Assessment: 28 August 2024				

APPENDIX C - AMEL COMPETENCIES - ICAO DOC 10098

Competency	Definition	OB no. Observable Behaviours (OB)
ICAO Competency 1 APPLICATION OF PROCEDURES	Description 1 Identify and apply procedures following appropriate documents and applicable regulations, using the appropriate knowledge	1.1 Identifies correct processes and procedures associated with a specific task 1.2 Demonstrates proper use of documents 1.3 Applies system knowledge appropriately 1.4 Demonstrates compliance with applicable regulations 1.5 Documents work performed or accomplished correct
ICAO Competency 2 WORK MANAGEMENT	Description 2 Manage available resources efficiently to prioritise and perform tasks in a safe and efficient manner	2.1 Plans, prioritises and schedules tasks effectively 2.2 Identifies where and when assistance is needed 2.3 Requests assistance when and where required 2.4 Manages time effectively 2.5 Selects appropriate tools, equipment and resources to support the efficient achievement of tasks 2.6 Uses available tools safely, efficiently and effectively 2.7 Offers and accepts assistance, when necessary, and asks for help 2.8 Inspects work area after completion of task 2.9 Verifies that tasks are completed to the relevant procedures 2.10 Manages environmental stress, interruptions, distractions, variations and failures effectively
ICAO Competency 3 SITUATIONAL AWARENESS	Description 3 Recognise and understands the maintenance environment and relevant information; anticipate future events	3.1 Maintains awareness of the maintenance environment 3.2 Maintains awareness of hazard situations 3.3 Recognises the future operational situations 3.4 Verifies that information is accurate and assumptions are correct 3.5 Is cognisant of ongoing concurrent activities 3.6 Assesses situations and reports deviations

ICAO Competency 4 TECHNICAL EXPERTISE	Description 4 Apply and improve technical knowledge and skills to perform maintenance safely and efficiently	4.1 Applies technical knowledge and skills as appropriate for the task 4.2 Answers technical question accurately 4.3 Keeps up to date on specialised technical knowledge and skills 4.4 Applies appropriate procedures following the applicable standards
ICAO Competency 5 SYSTEM THINKING	Description 5 Understand and determine how the various components of systems management interact and affect the overall system safety performance	5.1 Evaluates the inter-relationship between policies, processes and procedures 5.2 Evaluates the inter-relationship between various systems including quality planning, quality control and quality assurance of the stakeholder 5.3 Recognises importance of continuous improvement, reactive and proactive processes 5.4 Recognises the essential components of a functional safety management system and their interoperability 5.5 Recognises whether the stakeholder's management processes are appropriate for the size and scope of the operation 5.6 Correctly interprets performance data analysis 5.7 Assesses if the stakeholder safety objectives achieve the desired safety requirements 5.8 Provides feedback on potential deficiencies of the regulatory framework 5.9 Understands that root cause(s) of deficiencies results from single-point or systemic failure(s)
ICAO Competency 6 COORDINATION AND HANDOVER	Description 6 Manage coordination and handover between personnel	6.1 Coordinates with personnel and other stakeholders 6.2 Selects coordination/handover method based on circumstances, including the urgency of coordination, the status of facilities and the prescribed procedures

		6.3	Report safety-critical information
		6.4	Coordinates handover using the prescribed coordination procedures
		6.5	Coordinates changes to status of equipment, systems and functions
		6.6	Uses clear and concise terminology for verbal coordination and confirms that the message was properly received
		6.7	Uses standard message formats and protocols for non-verbal coordination
		6.8	Conducts effective briefings during position handover including transfer of maintenance tasks
ICAO Competency 7 RISK MANAGEMENT	Description 7 Demonstrate an effective safety approach to the work environment considering its risk profile and the availability of resources	7.1	Carries out comprehensive risk assessments using appropriate methodologies
		7.2	Makes decisions based on risk assessment outcome
		7.3	Identify accurately problem areas or hazards that may negatively impact safety
		7.4	Recognises company policies, work practices or organisational cultures that shows increased levels of risk
		7.5	Analyses root causes applicable to their task
ICAO Competency 8 TEAMWORK	Description 8 Operate safely and efficiently as a team member	8.1	Fosters an atmosphere of open communication
		8.2	Encourages team participation and cooperation
		8.3	Uses feedback to improve overall team performance
		8.4	Provides feedback constructively
		8.5	Shows respect and tolerance for other people
		8.6	Carries out duties in support of a team
		8.7	Uses negotiating and problem-solving techniques to manage unavoidable conflict when encountered

		8.8	Raises relevant concerns in an appropriate manner and good judgement
		8.9	Accepts feedback constructively
		8.10	Shares experiences with the aim of continuous improvement
		8.11	Manages interpersonal conflicts to maintain an effective team environment
		8.12	Anticipates and responds appropriately to the needs of others
		8.13	Demonstrates integrity and honesty
		8.14	Demonstrates soundness
ICAO Competency 9 PROBLEM-SOLVING AND DECISION MAKING	Description 9 Accurately identify and resolve problems using the appropriate decision-making processes	9.1	Determines possible solutions to an identified problem
		9.2	Prioritises effectively
		9.3	Manages risks effectively
		9.4	Considers rules and operating procedures when determining possible solutions to a problem in decision making
		9.5	Implements a chosen solution to a problem
		9.6	Organizes tasks following determined priorities
		9.7	Applies appropriate mitigation strategies for the identified hazards
		9.8	Works through problems without reducing safety
		9.9	Considers expediency and efficiency
ICAO Competency 10 SELF MANAGEMENT AND CONTINUOUS LEARNING	Description 10 Demonstrate personal attributes that improve performance and maintain an active involvement in self-learning and self-development	10.1	Manages stress in an appropriate manner
		10.2	Self-evaluates to improve performance
		10.3	Adapts to the demands of a situation as needed
		10.4	Engages in continuous development activities
		10.5	Takes responsibility for own performance; detects and resolves own errors
		10.6	Improves performance through self-evaluation

		10.7	Seeks and uses feedback to improve performance
		10.8	Maintains self-control and performs effectively in adverse situations
		10.9	Maintains awareness of developments in aviation and technological evolution
		10.10	Participates in learning activities
ICAO Competency 11 COMMUNICATION	Description 11 Communicate effectively in all situations and ensure clear and common understanding	11.1	Selects appropriate method of communication
		11.2	Uses effective verbal communication
		11.3	Uses effective written and other non-verbal communication
		11.4	Maintains situational awareness when selecting method of communication, speaks clearly, accurately and concisely
		11.5	Uses appropriate vocabulary and expressions for communications with stakeholders
		11.6	Demonstrates active listening by asking relevant questions and providing feedback
		11.7	Verifies comprehension of counterparts and corrects as necessary uses eye contact, body movements and gestures that are consistent with verbal messages where applicable, interprets non-verbal communication accurately
		11.8	Uses eye contact, body movements and gestures that are consistent with verbal messages where applicable
		11.9	Interprets non-verbal communication accurately.

APPENDIX D - APPLICATION FORMS AND CHECKLISTS

Form	Description
PEL-EX-CK-065	Examination and Assessment Implementation Compliance
PEL-EX-CK-066	AME Assessor Qualification Verification and Competencies Checklist
PEL-EX-CK-067	Practical Assessment Specification Compliance Checklist