

KEMENTERIAN PERHUBUNGAN  
DIREKTORAT JENDERAL PERHUBUNGAN UDARA

PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA

NOMOR : KP 435 TAHUN 2013

TENTANG  
PETUNJUK PELAKSANAAN PERATURAN KESELAMATAN  
PENERBANGAN SIPIL BAGIAN 65 - 1 (M) (*STAFF INSTRUCTION*) TENTANG  
PROSEDUR PEMBERIAN SERTIFIKAT KECAKAPAN PERSONIL AHLI  
PERAWATAN PESAWAT UDARA (*PERSONNEL LICENSING PROCEDURES*)

DENGAN RAHMAT TUHAN YANG MAHA ESA

DIREKTUR JENDERAL PERHUBUNGAN UDARA,

- Menimbang : a. bahwa dalam Keputusan Menteri Perhubungan Nomor KM 80 Tahun 2000 telah diatur mengenai Sertifikat Kecakapan Bagi Personil Perawatan Pesawat Udara;
- b. bahwa untuk melaksanakan hal sebagaimana dimaksud pada huruf a, perlu ditetapkan Petunjuk Pelaksanaan Peraturan Keselamatan Penerbangan Sipil Bagian 65 - 1 (M) (*Staff Instruction*) tentang Prosedur Pemberian Sertifikat Kecakapan Personil Ahli Perawatan Pesawat Udara (*Personnel Licensing Procedures*) dengan Peraturan Direktur Jenderal Perhubungan Udara;
- Mengingat : 1. Undang-Undang Republik Indonesia Nomor 1 Tahun 2009 tentang Penerbangan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 1, Tambahan Lembaran Negara Republik Indonesia Nomor 4956);
2. Peraturan Pemerintah Nomor 3 Tahun 2001 tentang Keamanan dan Keselamatan Penerbangan (Lembaran Negara Republik Indonesia Tahun 2001 Nomor 9, Tambahan Lembaran Negara Republik Indonesia Nomor 4075);

3. Peraturan Presiden Nomor 47 Tahun 2009 tentang Kedudukan, Tugas, Fungsi, Kewenangan, Susunan Organisasi Dan Tata Kerja Kementerian Negara RI sebagaimana telah diubah dengan Peraturan Presiden Nomor 91 Tahun 2011;
4. Peraturan Presiden Nomor 24 Tahun 2010 tentang Kedudukan, Tugas, dan Fungsi Kementerian Negara serta Susunan Organisasi, Tugas, dan Fungsi Eselon I Kementerian Negara sebagaimana telah diubah dengan Peraturan Presiden Nomor 38 Tahun 2013;
5. Peraturan Menteri Perhubungan Nomor KM 80 Tahun 2000 tentang Sertifikat Kecakapan Bagi Personil Perawatan Pesawat Udara;
6. Peraturan Menteri Perhubungan Nomor KM 60 Tahun 2010 tentang Organisasi dan Tata Kerja Kementerian Perhubungan;

MEMUTUSKAN :

Menetapkan : PETUNJUK PELAKSANAAN PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 65 - 1 (M) (*STAFF INSTRUCTION*) TENTANG PROSEDUR PEMBERIAN SERTIFIKAT KECAKAPAN PERSONIL AHLI PERAWATAN PESAWAT UDARA (*PERSONNEL LICENSING PROCEDURES*).

Pasal 1

Petunjuk Pelaksanaan Peraturan Keselamatan Penerbangan Sipil Bagian 65 - 1 (M) (*Staff Instruction*) tentang Prosedur Pemberian Sertifikat Kecakapan Personil Ahli Perawatan Pesawat Udara (*Personnel Licensing Procedures*), sebagaimana tercantum dalam Lampiran Peraturan ini.

Pasal 2

Sejak berlakunya peraturan ini, Keputusan Direktur Jenderal Perhubungan Udara Nomor : SKEP/22/1/2002 tentang Petunjuk Pelaksanaan (Staff Instruction (M) Nomor 65 - 1) tentang prosedur pemberian sertifikat kecakapan personil ahli perawatan pesawat udara dinyatakan tidak berlaku.

Pasal 3

Direktur Kelaikan Udara dan Pengoperasian Pesawat Udara, mengawasi pelaksanaan peraturan ini.

Pasal 4

Peraturan ini mulai berlaku pada tanggal ditetapkan

Ditetapkan di : JAKARTA  
pada tanggal : 19 September 2013

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

HERRY BAKTI

SALINAN Peraturan ini disampaikan kepada :

1. Sekretaris Jenderal, Kementerian Perhubungan;
2. Inspektur Jenderal, Kementerian Perhubungan;
3. Sekretaris Direktorat Jenderal Perhubungan Udara;
4. Para Direktur di Lingkungan Ditjen Perhubungan Udara;

SALINAN dibuat sesuai dengan aslinya  
KEPALA BAGIAN HUKUM DAN HUMAS  
DITJEN PERHUBUNGAN UDARA



# Staff Instruction

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**SI 65 – 1 (M)**

Personnel Licensing Procedures

Revision : 01  
Date : 04 April 2013

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**REPUBLIC OF INDONESIA – MINISTRY OF TRANSPORTATIONS  
DIRECTORATE GENERAL OF CIVIL AVIATION  
JAKARTA – INDONESIA**

**FOREWARD**

1. **PURPOSE** : This Staff Instruction has been prepared to guide and assist all Directorate of Airworthiness and Aircraft Operation personnel, Directorate General of Civil Aviations operators or applicants dealing with the Indonesian Authorities, in properly discharging their responsibilities and efficiently accomplishing their assigned tasks.
  
2. **REFERENCES** : This Staff Instruction handbook should be used in accordance with the applicable regulations.
  
3. **REVISION** : The improvement and revision of this Staff Instruction handbook is delegated to Director of Airworthiness and Aircraft Operation, Directorate General of Civil Aviations.

**DIRECTOR GENERAL OF CIVIL AVIATIONS,**

ttd

**HERRY BAKTI**

SALINAN ini dibuat sesuai dengan aslinya  
KEPALA BAGIAN HUKUM DAN HUMAS  
SETDITJEN HUBUD



## S.I. 65 – 1 Personnel Licensing Procedures

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**S.I. 65 – 1 PERSONNEL LICENSING PROCEDURES****CHAPTER 1 – INTRODUCTION****1.1 Purpose**

The purpose of this SI is to prescribe personnel licensing procedures. Compliance by DGCA staff will ensure that all activities are efficient and remain within the confines of the relevant legislation. It is expected that this will be achieved if all staff fully comply with the procedures as detailed in this SI. Full compliance with the SI procedures is therefore mandatory.

Suggestions from DGCA licensing personnel as to amendments to procedures which may improve efficiency are welcome.

A copy of this SI will be issued to each person engaged in personnel licensing activities. Should any person be in doubt as to the procedures to be used for any activity, reference is to be made to this SI.

This SI is authorised by the Director General of Civil Aviations and controlled on his behalf by Directorate of Airworthiness and Aircraft Operation.

(Signature)  
(Name)

## CHAPTER 2 – PERSONNEL LICENSING ORGANISATION

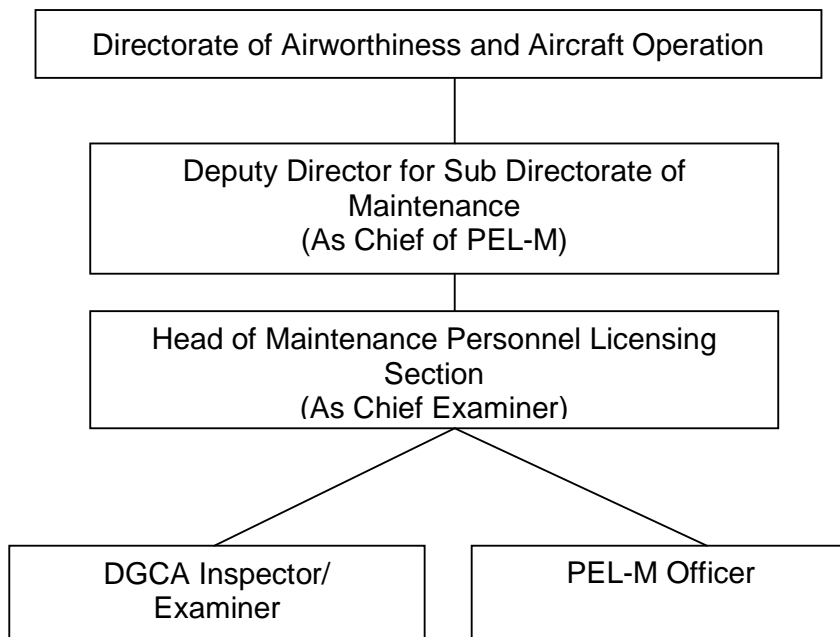
### 2.1 General

In DGCA of the Republic of Indonesia the personnel licensing office is refer as the DGCA Office.

The Maintenance Personnel Licencing Section (PEL-M) defines the licensing organization and procedureds of personnel licensing section upon which PEL-M-M organization delegated by Director General.

The MPEL-M office has to carry out licensing section are normally organized around four major functional areas. These areas are: Examination, Licensing, Training and Administration.

### 2.2 DGCA PEL-M Organizational Structures



## **2.3 PEL-M Qualifications, Duties and Responsibilities of Key Personnel**

### **(a) Director of Airworthiness and Aircraft Operation**

#### **Responsible to:**

Director General

#### **Responsibilities:**

- (1). Develop and maintain standards, recommended practices and procedures relating to the licensing of flight crew and aircraft maintenance engineers. Ensure that these standards, recommended practices and procedures are in compliance with ICAO Annex 1 and, where appropriate, compatible with foreign licensing practices.
- (2). Have promulgated in Civil Aviation Safety Regulations, Advisory Circulars and Staff Instructions the approved licensing standards as amended from time to time.
- (3). Ensure that approved standards are being complied with and sound practices and procedures are being applied by regular inspections by staff of approved training organisations
- (4). Enforcement of Civil Aviation Safety Regulations relating to the licensing and maintenance of competency of flight crew and aircraft maintenance engineers and the recommending of action to suspend, cancel or amend licences when this appears appropriate.
- (5). Ensure that staffing, facilities and training are adequate and prepare forecasts to facilitate the continued proper functioning of the Personnel Licensing Office.
- (6). Regularly advise the Director General of the state of work and significant events and developments within the Personnel Licensing Office.
- (7). Ensure that the flight crew and aircraft maintenance engineers licensing activities are co-ordinated with other units of the DGCA.
- (8). Ensure that DGCA officers and other persons approved to conduct flight testing on behalf of the Director General are properly appointed, briefed and supplied with adequate guidance and documentation to carry out their tasks and ensure that an efficient recording system of such designated persons is maintained.
- (9). Arrange Sign for the issuance and amendment of Air Operator's Certificates, Operations Specifications, Approved Persons Lists, and such other licences or certificates as may from time to time be allocated and ensure the maintenance of registers such licences, certificates and lists.

- (10). Maintain liaison with overseas aviation authorities and the International Civil Aviation Organisation on matters concerning standards applicable to flight crew and aircraft maintenance engineer licences and ratings and to examination and flight test standards and techniques.
- (11). Initiate and direct study and research into flight crew and aircraft maintenance engineer licensing matters.
- (12). Perform such duties as may from time to time be directed.
- (13). Properly discharge all delegated powers.

**(b) Deputy Director for Maintenance (As Chief of PEL-M)**

**Deputy Director for Maintenance** should be a person who has the technical qualifications as an airworthiness engineer and a technical background in the other areas of maintenance and also licensing concern. Thorough knowledge of the licensing regulations, licensing practices, and procedures together with administrative ability and leadership qualities would enable him to discharge the duties of the PEL-M of Airworthiness engineer office as delegated by the Director.

**Responsible to:**

Director of Airworthiness and Aircraft Operation

**Qualifications:**

Aircraft maintenance engineer licence or equivalent.

**Responsibilities:**

- (1). Direct, maintain and develop as required an organisation for the examination of applicants for the various categories of Aircraft maintenance engineer licences and ratings provided for in the Civil Aviation Safety Regulations.
- (2). Direct the preparation and review of detailed prescriptions and conditions of examination for the various categories of aircraft maintenance engineer licences and ratings provided for in the Civil Aviation Safety Regulations consistent with the privileges granted herein.
- (3). Direct the preparation and review and arrange for the publication of Advisory Circulars and Staff Instructions relating to the grant of aircraft maintenance engineer licences and ratings; maintenance and instructor approvals and certificates of competency provided by in the Civil Aviation Safety Regulations.
- (4). Maintain close liaison with regional authority in the examinations test of candidates for licenses/ratings.

- (5). Initiate and maintain where appropriate liaison with overseas aviation authorities with a view to effecting an exchange of information concerning examining techniques and standards pertinent to the maintenance of effective licensing standards.
- (6). In respect of approved training organisations and approved courses:
  - i. establish and maintain requirements for approval as provided for in the Civil Aviation Safety Regulations;
  - ii. direct the evaluation of applications for approval;
  - iii. establish and maintain standards of knowledge and instructing skill for instructors approved to instruct thereat consistent with the standard and scope of the requirement of the rating in question;
  - iv. direct the examination and audition of instructors seeking approval; and
  - v. direct the regular inspection of premises and records of approved training organisations for compliance with standard requirements and recommend such action as considered necessary in cases of non-compliance therewith;
- (7). Direct the evaluation of manufacturers' maintenance training course examinations and the examination of training courses approved or required by overseas airworthiness authorities with a view to granting exemption from type examination to applicants for ratings.
- (8). Direct the evaluation of training courses and testing methods of applicants for certificates of competency for welding and non-destructive testing.
- (9). Develop, maintain, and direct standards appropriate for the approval of amateur-built aircraft stage inspectors.
- (10). Develop and maintain effective liaison with other organisations conducting training and/ or examination of aircraft maintenance engineers and tradesmen.
- (11). Maintain a programme of visits to approved training organisations for the purpose of observing first hand current training and maintenance practices and to maintain rapport with instructors and maintenance personnel.

**(c) Head of Maintenance Personnel Licensing Section (Chief Examiner).**

**Chief examiner** should have extensive experience as an authorised Examiner in his specialty as well as through knowledge of the licensing regulations, licensing practices, and procedures together with administrative ability and leadership qualities.

**Responsible to:**

Deputy Sub Director of Maintenance

**Qualification:**

- (1) Aircraft Maintenance Engineer License/ diploma for basic aircraft knowledge or equivalent
- (2) Have high personal integrity
- (3) Have thorough knowledge of the licensing system
- (4) Have knowledge of and ability to apply and interpret the regulations, policies and applicable guidance materials.
- (5) Have no personal or professional conflicts of interest with the examination function
- (6) Have a strong background in training and assessment;
- (7) Have excellent written language skills; and
- (8) Be computer literate, as appropriate.

**Responsibilities:**

- (1). Produce and arrange for the publication of pamphlets and information circulars for guidance of applicants for licenses and ratings.
- (2). Direct the staff of examiners in assessing the extent of examination to be undertaken by applicants for validation of foreign maintenance licences/approvals
- (3). Establish and maintain a system for ensuring that oral and written examining techniques are effective and compatible with the current aviation environment.
- (4). Establish and maintain an efficient clerical system for the preparation and grant of licences, approvals and certificates to successful candidates.
- (5). Establish and maintain standards of knowledge and lecturing skill for instructors approved to lecture thereat consistent with the standards and scope of the requirements of the license or rating in question.

- (6). Maintain close liaison with examiners in the oral examination of candidates for aircraft maintenance engineer licences, ratings, maintenance approvals, instructor approvals and certificates of competency.
- (7). Direct the evaluation of manufacturers' maintenance training course examinations and the examination of training courses approved or required by overseas airworthiness authorities with a view to granting exemption from type examination to applicants for ratings.
- (8). Direct the staff of examiners in the preparation of examination question papers in the marking of candidates' scripts to ensure that standards consistent with current maintenance practices and the privileges granted by the licences or ratings in question are established and maintained.
- (9). Provide training for examiners to ensure their effectiveness in their allotted duties.

**(d) DGCA Inspector / Examiner**

The qualifications required for DGCA PEL-M Inspector should be familiar with inspection function of the Personnel Licensing system and administrative functions. The DGCA PEL-M Inspector plays an important role in the efficiency, quality of AME License and integrity of a Personnel Licensing system.

The details of qualification required for DGCA PEL-M Inspector refer to SI HRD-01.

**Responsible to:**

Director of Airworthiness and Aircraft Operation, Head of Maintenance Personnel Licensing Section as Chief Examiner (when action as examiner)

**Qualifications:**

- (1). An Aircraft Maintenance Engineer License/ diploma for basic aircraft knowledge or equivalent.
- (2). Have high personal integrity;
- (3). Have no disqualifying record regarding administering of official exams;
- (4). Have acceptable sight and hearing;
- (5). Have the ability to follow instructions but act decisively when needed;
- (6). Ideally have a teaching or supervisory background;
- (7). Have no personal or professional conflicts of interest with his or her examination supervision function; and
- (8). Be computer literate as appropriate

**Responsibilities:**

- (1). Conducts the writing test and skill test is responsible for determining that the applicant meets acceptable standards of knowledge and skill in the assigned subject areas.
- (2). Prepare and periodically review the syllabi for license and rating examinations for the personnel in his held of speciality, defining the qualifying conditions and standards.
- (3). Prepare examination question papers for license and rating examinations and mark the candidates answer sheet.
- (4). Maintain a statistical review to determine the effectiveness of the license and rating examinations
- (5). Evaluate the technical knowledge content of foreign license and ratings qualifications.
- (6). Conducts in the preparation of examination question papers in the marking of candidates' scripts to ensure that standards consistent with current maintenance practices and the privileges granted by the licences or ratings in question are established and maintained.
- (7). Conducts the evaluation of applications for exemption from basic/type examination from applicants who have completed an approved course of training.
- (8). Conducts the extent of examination to be undertaken by applicants for validation of foreign maintenance licences/approvals
- (9). Assess the extent of the technical knowledge examinations to be taken by applicants for the recognitions of foreign licenses and ratings.
- (10). Brief and liaise with examinations supervisors and supervise examinations if required.
- (11). Conducts the evaluation of applications for approval for in-house training.
- (12). The examiner may require the applicant to repeat that Task, or portions of that Task, if the examiner determines that a Task is incomplete, or the outcome uncertain.
- (13). Carry out such other duties as may from time to time be directed.

**(e) Technical Licensing Officer****Responsible to:**

Head of Maintenance Personnel Section

**Qualifications:**

An administration certificate/diploma or equivalent.



**Responsibilities:**

- (1). Assess and approve applications for the issue or renewal of professional licences and ratings.
- (2). Assess applications for the validation of overseas licences and ratings to determine examination.
- (3). Evaluate military aircrew qualifications to determine examination for civil licence and/or rating Issue.
- (4). Maintain the Registers of Airline Approved and Aero Club Approved Persons.
- (5). Supervise day-to-day activities of the Chief Licensing Clerk.

**2.4 Qualification DGCA PEL-M Inspector**

The qualifications required for DGCA PEL-M Inspector should be familiar with inspection function of the Personnel Licensing system and administrative functions. The DGCA PEL-M Inspector plays an important role in the efficiency, quality of AME License and integrity of a Personnel Licensing system.

The details of qualification required for DGCA PEL-M Inspector refer to SI HRD-01.

**2.5 Delegation of Functions and Responsibilities****(1) General**

DGCA may not find it possible or convenient to fulfill directly some of the PEL-M obligations. In such cases the DGCA may enter in some agreements with other service providers to fulfill some of its obligations.

The reasons for which a licensing Authority wants wish to delegate some of its functions to a service provider are the absence of the qualified personnel, technical or material resources.

**(2) Delegation of Personnel Licensing Activities to Service Providers.**

DGCA can delegate some of their licensing activities to service providers. The delegation is limited to the delivery of the Written Examination while in others the contractor provides the full examination system. The reasons for delegating such functions can either be the lack of expertise within the DGCA or that such an arrangement allows the provision of a better and/or more efficient service to the customer.

The contractual arrangements between a DGCA and a Service provider are usually fairly detailed as all the aspects of the delegation of function.

## **CHAPTER 3 – OVERVIEW OF PERSONNEL LICENSING SYSTEM**

### **3.1 Background**

The licensing, or certification, of certain aviation personnel is a prerequisite for the orderly control and development of a safe and economical air transport environment. Internationally agreed standards require that maintenance personnel and others are licensed by their regulatory authority. The regulatory authority responsible for the issue of these licences in Indonesia is the Directorate General of Civil Aviation.

### **3.2 Qualifications and Licences**

A licence is not the same as a qualification and differs in two important ways. It's important to appreciate the difference between a qualification, such as a bachelor's degree, and a licence of any kind. Firstly, a qualification, once gained, remains with the holder for his or her lifetime. The holder of a licence may allow it to lapse, or it may be suspended or revoked by the issuing authority. A licence, whether it is a motor vehicle driver's licence, an aircraft maintenance engineer licence, is a "permit to do something". Secondly, because a licence is a permit to do something, there are always privileges associated with it. In contrast, the holder of a qualification is not automatically authorised to do anything. He or she may be qualified to undertake certain work, but there is no authorisation given with the qualification, there is no "permit to do something" granted with the award of the qualification. In a wider context, the grant of some licences, such as a licence to practice medicine or law, usually requires the applicant to hold an appropriate qualification, such as a medical or law degree. The qualification on its own does not authorise the enjoyment of privileges.

DGCA issues qualifications to aircraft maintenance engineers. Known as Basic Certificates, these qualifications are a prerequisite for the grant of an aircraft maintenance engineer licence. Basic Certificates do not grant privileges of any kind.

### **3.3 Licence Ratings**

Aviation personnel are granted licences that authorise the holder to exercise specified privileges; to perform the duties of a pilot, to carry out aircraft maintenance etc. The particular aircraft or aircraft components for which the licence is valid are specified in the rating that forms part of the licence. Once granted, a licence may be extended to include other types of aircraft or aircraft components by the grant of additional ratings.

### **3.4 Training**

There are two kinds of training course that licence applicants must complete. They are 'basic' and 'type' courses. A basic course of training is a general course appropriate to the category of licence sought. A type course

of training relates to a specified aircraft or group of aircraft components and is associated with the grant of a rating. The grant of many ratings is conditional upon the applicant having successfully completed a course of type training.

Training courses that are required for the grant of particular licence categories or ratings are approved by the DGCA to ensure that they comply with appropriate training standards.

### 3.5 Licence Issue

The four key elements with which all licence applicants must comply are age, knowledge, skill and experience.

- (a). **Age**                    The applicant for a maintenance licence or certificate shall be at least 18 years of age.
- (b). **Knowledge**        Knowledge requirements are met through training and examinations. Examinations may be written or oral.
- (c). **Skill**                    The key word here is 'demonstrate'. The applicant must demonstrate the ability to competently exercise the privileges applied for.
- (d). **Experience**        Appropriate experience is required for licence and rating issue and for the continuation of licence privileges. Licence privileges that are no longer being exercised may be revoked if the applicant has had insufficient recent experience.

### 3.6 Licence Privileges

Aircraft maintenance engineers may perform and/or certify work performed on aircraft or components for which ratings are held.

### 3.7 Licence Renewal

Unless suspended or revoked, licences are valid for two years from the date of issue. Renewal procedures are designed to ensure that licence holders have sufficient recent experience to warrant the continuation of the licence privileges originally granted.

## CHAPTER 4 – PERSONNEL LICENSING LEGISLATION

### 4.1 Primary Legislation

The Convention on International Civil Aviation, signed in Chicago in 1944, is the basis upon which all international civil aviation is regulated. As a signatory to the Convention, Indonesia has an obligation to comply, as far as it is possible, with the international standards of this Convention.

The Convention may be thought of as an international "Civil Aviation Act" and it obligates each signatory state to enact its own legislation along the lines of the Convention.

The Law of the Republic of Indonesia Number 01 Year 2009 is, in effect, Indonesia's "Civil Aviation Act" and, as such, is in compliance with the Convention. Article 58, reproduced here in full, provides for the competency of aviation personnel as follows:

#### **Article 58**

- (1) All aviation personnel shall have a certificate of competency.
- (2) Aircraft personnel with direct involvement in an operation of aircraft shall have legitimate and valid license.
- (3) The license as mentioned in item (2) shall be issued by the Minister after the aircraft personnel concerned meet the following requirements:
  - a. administrative;
  - b. physically and mentally healthy;
  - c. holding certificate of competency in his/her field; and
  - d. pass the examination
- (4) The license as mentioned in item (3) shall be obtained through education and training conducted by approved organization.

In summary, Article 58 says that aviation personnel must hold a 'certificate of competency' which must be gained through education and training. In this context a certificate of competency can be a licence, certificate, authorisation or approval. Furthermore, the procedures for gaining such a licence, authorization or approval shall be in accordance with regulations, i.e. Civil Aviation Safety Regulations.

### 4.2 International and National Regulations

The Annex's to the Convention provide the standards with which national regulations should conform. Annex 1 prescribes the international standards and recommended practices for personnel licensing. In respect of personnel licensing, Annex 1 can be thought of as "international regulations".

The further regulations prescribed by Article 61 are Civil Aviation Safety Regulations (CASR). The national regulations for maintenance personnel licensing are in CASR:

- Part 65 Aircraft Maintenance Engineer Licences.
- Part 147 Aircraft Maintenance Training Organisations.

### 4.3 Explanatory Documents

Annex's to the Convention are supported by other documents containing explanatory material. In respect of personnel licensing and training, these include:

ICAO Doc 9401	Manual on Establishment and Operation of Aviation Training Centres
ICAO Doc 9379	Manual of Procedures for Establishment and Management of a State's Personnel Licensing System
ICAO Doc 9683	Human Factors Training Manual
ICAO Doc 7192	Training Manual.

In a similar way, state's issue explanatory material that offers guidance to assist their aviation industry's to comply with national regulations. In Indonesia, these publications are Advisory Circulars (AC's). The relationship between international and national legislation is shown in the Table 1 below.

<b>INTERNATIONAL</b>	<b>NATIONAL</b>
Convention on International Civil Aviation	The Law of the Republic of Indonesia Number 01 Year 2009
Annex's to the Convention	Civil Aviation Safety Regulations
ICAO Documents	Staff Instructions and Advisory Circulars

Table 1 showing relationship of international and national legislation

## CHAPTER 5 - EXAMINATION TASKS

### 5.1 General

The examination tasks of a PEL-M Section are complex, as they require a high level of experience and expertise in the licensing of maintenance engineer. Executing the task also requires the highest technical and ethical integrity as well as good judgment.

The tasks related to the examination function include:

- (1). Designing the written examinations of aircraft maintenance engineer who intend to obtain/ renew licenses or add new aircraft types, rating or authorisations to their license;
- (2). Reviewing, evaluating and marking written tests;
- (3). Carrying out oral examinations of different specialities, as required;
- (4). Participating in committees assigned for skill surveillance and control over the license holders or trainees to conduct field competency checks.

### 5.2 Examination Standard Test

CASR 65 Appendix B specifies the examination syllabus for an aircraft maintenance engineer in which knowledge and skill must be demonstrated by the applicant before the issuance of an AME License with Airframe, Powerplant and/or Avionic rating.

The CASRs provide the flexibility that permits the DGCA to publish skill test standards (STS) containing knowledge and skill specifics in which competency must be demonstrated. "Knowledge" (oral) elements are indicated by use of the words *"Exhibits knowledge of..."*. "Skill" (demonstrations) elements are indicated by the use of the words *"Demonstrates the ability to..."*.

#### Examination Performance Level Descriptions

##### (a) LEVEL 1

- Know basic facts and principles.
- Be able to find information and follow directions and written instructions.
- Locate methods, procedures, instructions, and reference material.
- Interpretation of information not required.
- No skill demonstration is required.

Example:

--- Locate specified nondestructive testing methods. (Level 1)

Performance Standard:

The applicant will locate information for nondestructive testing.

The subject areas from element 1 can only be tested at Level 1.

**(b) LEVEL 2**

- Know and understand principles, theories, and concepts.
- Be able to find and interpret maintenance data and information and perform basic operations using appropriate data, tools, and equipment.
- A high level of skill is not required.

Example:

--- Detect electrical leakage in electrical connections, terminal strips, and cable harness (at least 10 will have leakage faults). (Level 2)

Performance Standard:

Using appropriate maintenance data and a multimeter, the applicant will identify items with leakage faults.

**(c) LEVEL 3**

- Know, understand, and apply facts, principles, theories, and concepts.
- Understand how they relate to the total operation and maintenance of aircraft.
- Be able to make independent and accurate airworthiness judgments.
- Perform all skill operations to a return-to-service standard using appropriate data, tools, and equipment. Inspections are performed in accordance with acceptable or approved data.
- A fairly high skill level is required.

Example:

--- Check control surface travel. (Level 3)

Performance Standard:

Using type certificate data sheets and the manufacturer's service manual, the applicant will measure the control surface travel, compare the travel to the maintenance data, and determine if the travel is within limits.

**5.3 Written Examination Test Venues****5.3.1 DGCA Examination Venues**

Venues at which DGCA conducts personnel licensing examinations are listed in Attachment 1 of this chapter.

**5.3.2 Standard examination room**

Examination room shall:

1. Have proper cooling and ventilation;
2. Adequate lighting. Situation that create glare on computer monitor screens should be avoided.
3. Freedom from noise, distractions, visual aids. Situations that create noise in or around the testing area should be avoided.

Test rooms must be free of any aviation-related posters that may assist an applicant in answering test questions. Test rooms must be free from any other activity during testing sessions.

4. For computer testing, at least two operational computer terminals during normal business hours.
5. Have seating arrangement as to prevent cheating or other unauthorized conduct as defined in CASR Part 65.19
6. Ease of applicant surveillance during testing sessions.
  - a. Surveillance may accomplished with the test invigilator physically stationed in the testing room
  - b. Through a glass window of adequate size for monitoring testing room activities, or
  - c. Through video monitoring system that cover the entire testing area.
7. A secured area for storing test material and computer hardware containing test data.
8. Adequate arrangements for safety and emergencies.
9. Restroom facilities located in the same building where the knowledge testing is conducted.

### **5.3.3 DGCA Examination Invigilators**

A list of persons approved to invigilate DGCA personnel licensing examinations is in Attachment 2 of this chapter.

### **5.3.4 Other Examination Venues**

Venues at which other organizations conduct personnel licence examinations approved by DGCA are listed in Attachment 3 of this chapter.

### **5.3.5 Scheduled Maintenance Engineer Examinations Timetable**

Venues, times and dates at which scheduled maintenance engineer licence examinations are conducted are listed in Attachment 4 of this chapter.

### **5.3.6 On-demand Examination Procedures** Examinations may be provided

on demand in accordance with the following procedures:

- (a). application must be received at least two weeks before the intended date of the examination
- (b). the applicant is to be advised the date, time and place of the examination at least two days in advance



## 5.4 Procedure for Examinations Test

- (1) Required qualification for an inspector to be authorized to conduct aircraft maintenance engineer licence written tests.

As the DGCA requires that all examination tests be conducted in accordance with the appropriate AME Licence Skill Test Standards (STS), to carry out this task, the inspector is required to have the following qualifications:

- a) Knowledge of the PEL-M (Personnel Licensing) system including requirements, policies and procedures.
  - b) As a DGCA Licensing inspector and examiner.
- (2) Application document
- a) The inspector shall ensure that the applicant bring/submit the following documents:
    - i. A properly completed Application Form 65.01;
    - ii. A copy of ID or Passport;
    - iii. A current AMT licence (for an additional rating);
    - iv. A copy of training certificate;
    - v. Personal records, letters or other documents substantiating the experience or training shown on the Application Form;
    - vi. An acceptable form of photo identification.
    - vii. A copy of evidence of payment for examination fee.
- (3) Review the documents and records submitted above.
- (4) Advice of rejection to an applicant  
Whenever it is found that an applicant does not meet the requirement as stated in the CASR Part 65, the DGCA will return his application within 10 working days. From the returned application, an applicant will find the reason for the rejection of his application.
- (5) Verify applicant's identity. Inspect acceptable forms of identification to establish the applicant's identity. Compare the identification with the personal information provided on the Form 65.01.
- a) If the applicant's identity can be verified, proceed with the appointment.
  - b) If the applicant's identity cannot be verified because of lack of identification or inadequate identification, explain what types of identification are acceptable. Advise the applicant to return with appropriate identification to reapply.
  - c) If the applicant's identity appears to be different from the information supplied on the Form 65.01, or it appears that an attempt at falsification has been made, do not continue with the appointment.

Whenever it is found that the applicant meets or do not meet the requirement as stated in the CASR Part 65 the notification letter will be

issued or rejected the application form to the applicants within 14 (fourteen) days after the date of receipt.

- (4) Establish Eligibility. Determine if the applicant meets the specific eligibility and experience requirements for licensing, CASR 65 specifies requirements for adding an additional rating or for renewing a rating. The following list expands on the basic requirements.
  - a) Age: Ensure that applicant is at least 18 years of age.
  - b) Knowledge: Request and examine the knowledge test report as acceptable evidence of having passed the knowledge test and to ensure the 24 calendar month time frame has not expired, if applicable.
  - c) Experience: Check that the applicant has the minimum experience required for the Certificate/License and rating sought.
  - d) Skill: Check the Form 65.01 to determine the applicant has not suspend or something falsification.
  - e) Is able to read, write, speak and understand either the Indonesian or the English language, and to read, write and understand technical English as used in manufacturers manuals.
- (5) Conduct the examinations test. After determining the applicant is eligible and meets all prerequisites for the AME licence or rating sought.
  - a) Using CASR 65 and AC 65.02 as appropriate for guidance, fill in the Test Planning Sheet to ensure the examination test covers all the required areas of the license or rating sought. Conduct the skill test according to the Test Planning Sheet.
  - b) All Subjects required for the rating sought shall be tested.
  - c) The minimum passing grade in each Subject Area is 70 percent in regard to the examination test.
- (6) Notification Result Examination Test
  - a) To pass an examination test, subject of examination should be record on DAAO form 65.14 and will be published to the applicant by the result aircraft maintenance engineer.
  - b) If the applicant fails or below 70 percent grade requirement, the applicant should be get notification of result examination aircraft maintenance engineer.

The result of the examination on DAAO Form 65.21 will be notified by letter per batch or group or examination number and divided into basic certificate A1, A2, A3, A4, C1, C2, C4 and Type Ratings within 30 (thirty) days after the date of the examination.

The notification will only consist of “Pass” or “Failed” statement, but the scorers are kept in the file or records on DAAO Form 65.14.

(7) Re-examination after failure

An applicant for a written, oral, or practical examination for a license or certificate, or for an additional rating under Part 65, may apply for re-examination the applicant may apply re-examination and return the application and all submitted documents to the applicant after the published of result examination aircraft maintenance engineer

## 5.5 Examination Records

Record the final results of the Examination test on the reverse side of the DAAO Form 65.14. When the applicant has written test as more than 70%, workmanship and safety in each subject area check the PASS box on DAAO Form 65.13 for that portion test and enter the expiration date: otherwise, check the FAIL box, but do not enter a date when the applicant fails or below 70%. Make all entries in permanent dark ink.

The expiration date for each examination test for type rating or group rating passed is 24 calendar months after the section is passed.

The copies of questions paper shall be destroyed within 1 (one) weeks after the date of examination.

The answer sheet, the list of examinee names and the examination result records will be kept for at least 2 (two) years after the date of examination for those who pass the examination.

**Attachment 1**

Scheduled examinations.

**NOTICE**

DSKU/ ..... /UDJ/ .....

**NAME OF CANDIDATE AIRCRAFT MAINTENANCE ENGINEER EXAMINATION  
NO. ....**

**TYPE OF EXAM :** .....

**DATE :** .....

**TIME :** .....

NO. APPL.	NAME	COMPANY	NO. APPL.	NAME	COMPANY
LOCATION			LOCATION		

**Attachment 2**

The examination result records.

**DIRECTORATE GENERAL OF CIVIL AVIATION  
DIRECTORATE OF AIRWORTHINESS AND AIRCRAFT OPERATION**

KARYA BUILDING LT. 22, JL. MEDAN MERDEKA BARAT NO. 8 JAKARTA  
TELP.: (62-21) 3506664-5 FAX.: (62-21) 3506663

<b>AIRCRAFT MAINTENANCE ENGINEER LICENSE</b>
--

<b>EXAM NO. :</b>	.....
<b>DATE :</b>	.....
<b>PERIOD :</b>	.....

NO	EXAMINEE NO.	NAME	COMPANY	SUBJECT	RESULT (%)	SIGNATURE
01						01
02						02
03						03
04						04
05						05
06						06
07						07
08						08
09						09
10						10
11						11
12						12
13						13
14						14
15						15
16						16
17						17
18						18
19						19
20						20

PLACE :	Supervisor examination :	Examineer :
	1	1
	2	2

Acknowledge  
Deputy Director of Maintenance

JAKARTA,  
Head of Examination Team

( ) ( )

**Attachment 3**

The result of the examination.

**NOTICE**

**DSKU/ ..... /UDJ/.....**

**THE RESULT OF THE AIRCRAFT MAINTENANCE ENGINEER LICENCE  
NO. .... (number of paper examination) PERIOD OF MONTHS**

EXAMINEE NO.	N A M E	COMPANY	SUBJECT EXAM.	RESULT	REMARKS

DAAO Form 65-21 (02-10)

## Attachment 4

The answer sheet the list of examinee



**DIRECTORAT GENERAL OF CIVIL AVIATIONS**  
**DIRECTORAT OF AIRWORTHINESS AND AIRCRAFT OPERATION**

JI. MEDAN MERDEKA BARAT NO. 8 GEDUNG KARYA Lt. 22 JAKARTA 10110

TELP. (62-21) 3811308 FAX (62-21) 3506663.

**ANSWER SHEET FOR AIRCRAFT MAINTENANCE ENGINEER LICENSE**

<b>EXAM NO. :</b>	<b>SUBJECT OF EXAM :</b>	<b>PLACE :</b>
-------------------	--------------------------	----------------

**INSTRUCITION**

1. The question of multiple choice type and only 1 (one) of the answers is correct.
2. The available time is 120 minutes or each correct answer achieves 1 %.
3. The test is passed, if 70% of the questions are answered correctly.
4. Any examinee found during a knowledge examination to be cheating or in possession of the material pertaining to the examination subject other than the examination papers and associated authorized documentation shall be disqualified from taking the examination.

<b>DATE :</b>	<b>NUMBER OF EXAMINEE :</b>	<b>SIGNATURE OF EXAMINEE :</b>
---------------	-----------------------------	--------------------------------

No.	A	B	C	D
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03				
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24				
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No.	A	B	C	D
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27				
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46				
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48				
49				
50				

No.	A	B	C	D
51				
52				
53				
54				
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56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
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No.	A	B	C	D
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100				

<b>DGCA OFFICIAL</b>	<b>SIGN</b>	<b>DATE</b>
<b>SUPERVISOR</b>		
<b>EXAMINER</b>		

<b>ANSWER ARE CORRECT</b>	
<b>RECOMMENDATION</b>	<b>PASSED</b>
<b>REMARKS:</b>	<b>NO PASSED</b>

DAAO Form 65-13 (02-10)

## **CHAPTER 6 – PREPARATION OF EXAMINATION PAPERS**

### **6.1 General**

The purpose of personnel licensing examinations is to test the knowledge of licence and rating applicants. Each examination must therefore be appropriate to the category of licence sought.

### **6.1 Authorised Examiners**

Examiners authorised for the purpose by the Director of Airworthiness and Aircraft Operation must prepare all examinations. A list of authorised examiners, and the papers they are authorised to prepare, is in Attachment 1 of this chapter.

### **6.2 Refresher Training**

Authorised Examiners will undergo periodic refresher training in accordance within 2 years periodic time.

The details of initial or refreshing training required for DGCA PEL-M Inspector refer to SI HRD-01.

### **6.4 Reference Library**

Each authorised examiner shall maintain a reference library consisting of CASR, AC's, SI's and text books appropriate to the examinations he or she is authorised to write. These libraries are for the purpose of assisting authorised examiners to research and review examination questions in their subjects. Requests for additional text books shall be made in writing through section heads.

### **7.5 Examination Question Banks**

Each authorised examiner shall maintain a question bank from which examination papers may be prepared. Question banks shall contain sufficient questions to ensure that successive examination papers contain no more than 50% of the questions used in the previous paper.

### **7.6 Examination Validity**

Each authorised examiner shall constantly review and amend as necessary questions in his or her question bank. Library texts shall be used for this purpose. Each question in the bank shall contain a reference to the text where the correct answer may be found.



## 6.7 Examination Security

Authorised examiners are to treat all examination questions and papers as if they were personal and confidential documents. They are not to be left lying on unattended desks where unauthorised persons may see and read them. Answers to questions in the bank and for individual examination papers shall be stored separately from the questions themselves. Each authorised examiner is responsible for the security of his or her questions and examination papers from the time of writing through to printing and distribution to examination centres.

## 6.8 Writing Examination Questions and Papers

**Writing Guidelines** (See *Attachment 4* of this Chapter for guidelines for writing multi-choice questions).

### Writing Checklist

Use the following checklist to review the examination paper you prepare.

- Are all topics covered?
- Are there four questions per topic?
- Are all subtopics covered?
- Are the questions cross-referenced to the stated texts?
- Do the questions cover the topic to the depth indicated in the syllabus?
- Are the questions clear and unambiguous?
- Does each question contain four responses to choose from?
- Are there any typing errors?

### Procedure

1. Obtain the reference texts for the examination
2. Write the questions according to the guidelines in *Attachment 4 Writing Multi-choice Questions*
3. Check the paper to make sure that:
  - It covers all topics
  - It contains four questions per topic

- It includes questions covering all subtopics, wherever possible
- The questions are cross-referenced to the stated texts
- The questions cover the topic to the depth indicated in the syllabus
- Each question contains four responses.

If you are preparing a new examination, create a new file for the paper.

If you are adding questions to a question library, add the new questions to the existing topic or sub-topic file.

Circulate the examination paper among other examiners who have the responsibility of preparing examination papers for:

- Proof-reading
- Identification of ambiguous questions
- Any other relevant comments.

The checking examiner should:

- Proof-read the paper, identify any ambiguous questions and provide relevant comments.
- Return the paper to the examiner responsible for setting the examination paper.

Upon return the originating examiner must incorporate the other examiners' corrections and comments as appropriate.

Identify the paper with the relevant alpha/numeric serial number (the next number in the series). The paper is now approved.

Print the paper as a master.

Create an answer key by photocopying the examination paper and marking the correct responses on it.

Place the print master and answer key in the relevant folder stored in the examination Security Room.

### **Writing Basic Certificate for Aircraft Knowledge Examination Papers**

Except the graduate from Approved Maintenance Training Organization (AMTO) under part 147, the candidate for examinations should be following as:

#### **Writing Guidelines**

Essay questions are used for Basic Certificate A1, A2, A3, A4, C1, C2 and C4 examinations and are marked by the examiner.

- Write questions that elicit a short response from the candidate.
- Make sure that the questions comply with the relevant syllabus.
- If a series paper is being compiled, make sure that all the variants in the series are adequately examined.
- To ensure that the examination papers will be marked consistently, compile the answer key using relevant data or by writing sample answers to questions.

### **Procedure**

1. Identify the basic certificate A1, A2, A3, A4, C1, C2 and C4.
2. Obtain relevant general aircraft knowledge maintenance syllabus and other relevant data's publications.
3. Determine the number of questions to be generated for each topic area. This depends on the syllabus of the Module, but usually 100 questions are considered adequate for all module of a basic aircraft knowledge examination.
4. Write questions that cover the following areas:
  - Air law and airworthiness requirements
  - Natural science and aircraft general knowledge
  - Aircraft engineering
  - Aircraft maintenance
  - Human performance and limitations
5. If you are compiling a new examination, create a new file.
6. Create the answer key by using copies of the latest relevant data.
7. Circulate the examination paper and answer key among other examiners who have the responsibility of preparing examination papers for:
  - Proof-reading
  - Identification of ambiguous questions
  - Any other relevant comments.
8. Other examiner:
  - Proof-read the paper and answer key, identify any ambiguous questions and provide relevant comments.
  - Return the paper to the examiner responsible for setting the examination paper.
9. Incorporate the other examiner's corrections and comments as appropriate.
10. Identify the paper with the relevant alpha/numeric serial number (the next number in the series). The paper is now approved.
11. Print the paper as a master.

12. Place the completed examination and answer key in the relevant folder stored in the examination Security Room.

## **Writing Type Aircraft/Engine/System Examination Papers**

### **Writing Guidelines**

Essay questions are used for Type Aircraft/Engine examinations and are marked by the examiner.

- Write questions that elicit a short response from the candidate.
- Make sure that the questions comply with the relevant syllabus.
- If a series paper is being compiled, make sure that all the variants in the series are adequately examined.
- Make sure any diagrams used are clear and easy to read.
- To ensure that the examination papers will be marked consistently, compile the answer key using manufacturers' maintenance data or by writing sample answers to questions.

### **Procedure**

1. Identify the aircraft/engine type and model.
2. Obtain relevant manufacturer's maintenance manuals and other relevant manufacturer's publications.
3. Refer to the applicable examination syllabus and determine:
  - Which ATA chapters of the maintenance manual are applicable
  - Which topics are to be included in each examination part.
4. Read the ATA chapters of the maintenance manual and determine which areas need be tested.
5. Determine the number of questions to be generated for each topic area. This depends on the complexity of the aircraft/ engine/ systems, but usually 25 to 30 questions are considered adequate for each part of a Type examination.
6. Write questions that cover the following areas:
  - System description and operation
  - Location of components
  - System analysis and trouble shooting
  - Maintenance practices and procedures
  - Testing, including built-in test equipment (BITE).
7. If you are compiling a new examination, create a new file.
8. Create the answer key by using copies of the latest manufacturer-approved data.

9. Circulate the examination paper and answer key among other examiners who have the responsibility of preparing examination papers for:
  - Proof-reading
  - Identification of ambiguous questions
  - Any other relevant comments.
10. Other examiner:
  - Proof-read the paper and answer key, identify any ambiguous questions and provide relevant comments.
  - Return the paper to the examiner responsible for setting the examination paper.
11. Incorporate the other examiner's corrections and comments as appropriate.
12. Identify the paper with the relevant alpha/numeric serial number (the next number in the series). The paper is now approved.
13. Print the paper as a master.
14. Place the completed examination and answer key in the relevant folder stored in the examination Security Room.

## **Oral Examination Papers**

### **Writing Guidelines for Oral Examination papers**

#### **Procedure**

1. Use relevant manufacturer's service, maintenance, overhaul and operation manuals as reference texts for the oral examination questions.
2. Determine the areas of difference between the Type aircraft/engines relative to the Rating held and the Rating sought and compile an appropriate number of questions to cover these differences.
3. Ensure the scope and depth of the questions covers the relevant Type syllabi topics.
4. Compile a comprehensive answer key using copies of the latest manufacturer-approved data.

**Note:** The answer key must contain sufficient background information to enable the examiner who will conduct the examination to fully understand the system or component about which questions are being asked.

5. If you are compiling a new examination, create a new file.
6. Circulate the examination paper and answer key among other examiner's who have the responsibility of preparing examination papers for:
  - Proof-reading
  - Identification of ambiguous questions
  - Any other relevant comments.

7. Other examiners:
  - Proof-read the paper and the answer key, identify any ambiguous questions and provide relevant comments.
  - Return the paper and answer key to the examiner responsible for setting the examination paper.
8. Incorporate the other examiners' corrections and comments as appropriate.
9. Identify the paper with the relevant alpha/numeric serial number (the next number in the series). The paper is now approved.
10. Print the paper as a master.
11. Place the print master and answer key in the relevant folder stored in the examination Security Room.

### **Writing Practical Tests**

#### **Writing Guidelines**

Practical tests are used to test an applicant's ability to physically perform specific tasks. The examiner must be satisfied that an applicant possesses the necessary skills before he or she is granted additional maintenance/certification privileges.

As the requirements for each practical test vary widely, the form and contents of each test is left to the discretion of the assessing examiner.

**Attachment 1****Authorised Examiners**

<b>NO</b>	<b>NAME</b>	<b>NO STAMP</b>	<b>SIGN</b>	<b>AUTHORISED EXAMINATIONS</b>

---

Signature of Authorising Officer

## Attachment 2

### Writing Multi-choice Questions - Introduction

#### This attachment:

Describes some of the techniques used for writing multi-choice questions

Briefly describes the more common techniques for writing clear and unambiguous questions, and gives examples to illustrate the points being made

Provides a checklist for assessing multi-choice examination questions.

#### Authority for Data

When compiling multi-choice examination questions, use the recommended study references listed in the relevant AME syllabi.

### Techniques for Writing Clear and Unambiguous Questions

#### 1. Numerical Responses

##### Put Responses in Order of Magnitude

When numerical responses are used, put them in increasing or decreasing order of magnitude as shown in Examples 1 and 2.

**Example 1** How many bolts are used to secure the fuel valve to the fuel pump?

- (a) Two.
- (b) Four.
- (c) Six.
- (d) Eight.

**Example 2** How many bolts are used to secure the fuel valve to the fuel pump?

- (a) Eight.
- (b) Six.
- (c) Four.
- (d) Two.



### Use Even Increments for Responses

**Example 3** What is the correct pressure for the main wheels?

- (a) 120.
- (b) 125.
- (c) 130.
- (d) 135.

**Example 4** What is the correct pressure for the main wheels?

- (a) 120.
- (b) 122.
- (c) 130.
- (d) 133.

Example 3 is preferable to Example 4.

Vary this if the figures chosen have special significance - for example:

- For tyre pressures that are used on similar wheels in different positions
- For tyre pressures that are used on another aircraft that the candidate is familiar with and which could be confused with the type and model being examined.

## 2. Make Sure Ranges Do Not Overlap

If ranges are used in the responses, they should not overlap.

**Example 5** What is the correct pressure for the main wheels?

- (a) 20-22 psi.
- (b) 23-24 psi.
- (c) 25-26 psi.
- (d) 27-28 psi.

**Example 6** What is the correct pressure for the main wheels?

- (a) 21-23 psi.
- (b) 22-24 psi.
- (c) 23-25 psi.
- (d) 24-26 psi.

Example 5 is better because if a candidate knows that the nominal pressure is 25 psi, there are two "correct" answers in Example 6.

However, if both pressure and tolerance are critical, Example 6 may be acceptable.

### 3. Make Sure Tolerance Ranges Are Equal

If a tolerance is used, it preferable that the range is the same for all responses.

**Example 7** What is the correct pressure for the main wheels?

- (a) 120 ± 1 psi.
- (b) 125 ± 1 psi.
- (c) 130 ± 1 psi.
- (d) 135 ± 1 psi.

**Example 8** What is the correct pressure for the main wheels?

- (a) 120 ± 1 psi.
- (b) 125 ± 2 psi.
- (c) 130 ± 1 psi.
- (d) 135 ± 2 psi.

Example 7 is better because Example 8 may lead a candidate to or from the right answer.

Although it may seem acceptable to have a different tolerance for each response, this can result in a question which asks two questions.

**Example 9** What is the correct pressure for the main wheels?

- (a) 120 ± 1 psi.
- (b) 125 ± 2 psi.
- (c) 130 ± 3 psi.
- (d) 135 ± 4 psi.

The two questions asked in Example 9 are:

What is the correct pressure?

What is the tolerance?

If a candidate only knows the tolerance, he or she would score a correct answer without having any idea of the correct pressure.

### 4. Homogeneity

Make sure that all the distractors are homogeneous with the stem. In this case, homogeneous means that there is a clear link between all the responses and the stem, but there is not necessarily a direct link between the responses.

Lack of homogeneity is more common in complete-the-statement style of questions. This could be because examiners using the question style must have a question clearly in mind, but this clarity of intent is not necessary for the complete-the-statement style.

Lack of homogeneity can present candidates with more questions than intended.

**Example 10** To start the engine:

- (a). 28 V DC is required.
- (b). the battery must be installed.
- (c). the pneumatic duct must be pressurised.
- (d). clearance must be obtained from the ground staff.

This question asks a number of questions.

- Is the starter electric or pneumatic?
- What voltage is required?
- What is the battery function in the circuit?
- What duct pressure is required?
- What is the procedure to be used?

This could be because the stem is too general. Overcome this by framing a question clearly, before writing the responses.

**Example 11** What is the energy source for the starter? Which of the following must be connected...? What is the minimum duct pressure...?

There are occasions when homogeneity will not be obvious.

**Example 12** Which of the following is a true statement concerning the rear mount during an engine change?

- (a). New non-magnetic double hexagon nuts must be used.
- (b). Clean the mating surfaces with a Freon (non-residue) type solvent.
- (c). Apply Ease-off 990 to the complete mating surfaces.
- (d). Apply part torque to the forward bolts prior to full torque to the rear bolts.

While the responses in Example 14 do not seem to have much in common, all are steps (suitably altered) in the procedure for engine installation.

Use this type of response with caution because it is easy to get carried away and lose all homogeneity in the question.

Lack of homogeneity is often the result of a poor stem. To correct this problem it is usually necessary to rewrite or amend the stem and then review the responses.

## 5. Length

### Keep Responses Similar in Length

Try and keep responses to approximately the same length. To achieve this, look at the number of facts as well as the number of words. Unsure candidates will be drawn towards responses with more or less detail than the others.

However, there are occasions when a longer or shorter response must be accepted, as in Example 13.

**Example 13** Which of the following would cause an amber light to illuminate on the lower left of the p4 panel?

- (a). Low oil pressure.
- (b). Excessive differential pressure across the main oil filter.
- (c). Excessive oil temperature.
- (d). Excessive breather pressure.

Response 2 is acceptable because like the others, it has only one engine oil system parameter.

### Keep the Stem or Response as Short as Possible

Avoid excessive length in the stem or responses, as this tends to make the question difficult to read and understand. Try to keep to a maximum of three lines for the stem and two lines for the responses.

If a lot of detail is required in the stem, you may have to list the data.

**Example 14** Would the thrust reverse actuator run and if so in what direction in the following circumstances?

Log Entry : Reverser jammed at mid- travel following reverse selection. Full reverse not achieved.

Maint Action : Reverser jammed at left upper track. Drive Action cables disconnected from actuator, 3-way valve set to ground position, reverser lever at forward aircraft pneumatic system pressurised.

- (a). Yes, to retract, then stop.
- (b). 2, No.
- (c). Yes, to extend, then stop.
- (d). Yes, to extend, then to retract.

## 7. Key Words

Do not use key words only in the correct response. This will lead the unsure candidate to the correct answer. Ensure the key words either do not appear in any responses or appear in all responses.

**Example 15** The battery master switch of an electrical system connects or disconnects between the:

- (a). battery and the busbar
- (b). magneto and the distributor
- (c). busbar and the fuse strip
- (d). starter and the generator.

**Example 16** The battery master switch of an aircraft electrical system connects or disconnects the battery and the:

- (a). busbar
- (b). fuse strip
- (c). starter
- (d). generator.

In Example 15, the word "battery" in the first response gives away the correct answer. It is better to include "battery" in the stem as in Example 16.

## 8. NOT Questions

Although it is not desirable, it is sometimes necessary to ask a question as a negative. This needs extreme care and should only be used when a positive question cannot be used. Remember, the candidate is trained to identify **correct** answers - the negative question asks him or her to identify an **incorrect** answer.

As an example, use a negative question when a maintenance practice includes only three or four steps, limiting the number of plausible alternatives.

**Example 17** Which of the following is **NOT** included in the procedure for ... ?

For the response, list the three maintenance steps together with one plausible but incorrect step.

Another form of the stem might be:

**Example 20** Three of the following are included in the procedure for... Which one is **NOT** included?

**Note:** **NOT** is printed in capitals in bold type and underlined to emphasise to the candidate that this is a **not** question.

## 9. Multi-response Questions

It is often difficult to rewrite a question that asks many things so that it only asks one thing.

**Example 21** The elevators are:

- (a). mass balanced
- (b). hydraulically actuated
- (c). sealed to prevent water entry
- (d). armour coated on the undersurface.

This asks a number of questions:

- What balancing is provided?
- How is the elevator actuated?
- What sealing is provided?
- Is the undersurface protected?
- What protection is provided on the undersurface?

These multi-questions often result from a poorly framed stem. They are more common in complete the statement style questions. Rewriting the stem corrects the problem in most cases, as shown in Examples 20 to 22.

**Example 20** The elevator is operated by:

- (a). a servo tab
- (b). a cable system
- (c). a push rod system
- (d). hydraulic servos.

**Example 21** Excessive water is prevented from accumulating in the elevators by the use of:

- (a). drain holes
- (b). silicon sealer in all joints
- (c). rubber seals in all joints
- (d). epoxy adhesive in all joints.

**Example 22** What is used to protect the undersurface of the elevators from impact damage?

- (a). Armour-coat protective film.
- (b). Vinyl film.
- (c). Abrasive resistant paint.
- (d). Titanium skin.

## 10. Subjective Questions

Avoid subjective questions like Example 23.

**Example 23** How would you carry out the procedure for...

The candidate may simply describe how he or she would do the job, which answers the question but does not give the answer the examiner wants.

It is better to frame the question like Example 24:

**Example 24** What is the recommended procedure for...

This asks a question which has a definite correct answer.

## 11. Operator's Policy

Try to avoid distractors which could include an operator's policy that is different from manufacturer's or Authority policy.

If, for example, a manufacturer specifies a maximum length for a crack in a component of 3 inches while the operator limits cracks to 1 1/2 inches, there could be some confusion:

**Example 25** What is the maximum acceptable crack in the ... ?

- (a). 1 inch.
- (b). 1 1/2 inches.
- (c). 2 inches.
- (d). 3 inches.

In Example 25, responses (b) and (d) are correct. We are mainly concerned that the candidate knows the manufacturer's or DGCA's requirements. However, a candidate who selects the tighter operator's requirement should not be penalised, since it demonstrates the limit to which he or she has to work.

## 12. Mutually Inclusive Responses

Mutually inclusive responses have one or more responses included in another.

**Example 26** How many cascade vane assemblies may be missing and the reverser remain operative?

- (a). One.
- (b). Two.
- (c). Three.
- (d). Four.

If (c) is the correct response, then (a) and (b) are also correct since the reverser remains operative with one, two or three cascade vane assemblies missing. Correct this by rewriting the question.

**Example 27** What is the maximum number of cascade vane assemblies which can be missing and the reverser remain operative?

- (a). Two.
- (b). Three.
- (c). Four.
- (d). Five.

In this example the responses have been changed because the stem mentions "assemblies" plural. Therefore a response of "one" is implausible and could cause confusion or lead the candidate away from an incorrect response.

Another example of mutually inclusive responses is shown in Example 28.

**Example 28** Which of the following is correct concerning the mounting of the fuel shut-off valve?

- (a). Three bolts attach the valve to the front spar
- (b). Three bolts attach the valve and the actuator to the front spar
- (c). The valve must be attached to the front spar with three bolts before the actuator is attached
- (d). The actuator must be attached to the valve before the three mounting bolts are installed through the valve

If response (b), (c) or (d) is correct, so is (a). Therefore, the candidate can pick response (a) simply because it is included in all other responses. Since only one response is correct, (b), (c) and (d) must be incorrect. If (b), (c) or (d) is correct, the question has two correct responses.

Mutually inclusive responses tend to lead the candidate away from incorrect responses.

### 13. Telegraphese

This is shorthand used when writing down information quickly. It usually omits words like "the", "and" and "but".

Unfortunately while telegraphese need not detract from the meaning, the reader will sense "something is wrong" and may become confused about the question while attempting to determine what is wrong. Questions phrased like Example 29 are preferable to those like Example 30.

**Example 29** What would be the effect on the fuel flow if an FCU is operating on a test bench with constant inputs except that the PS4 input is increased from 15 psia to 150 psia?



**Example 32** What would be effect on fuel flow, if FCU on test bench with constant inputs except PS4 increased from 15 psia to 150 psia?

#### 14. Negative Responses

Avoid responses which negate the stem.

**Example 31** What lubricant is used on the elevator trim actuator cable drum?

- (a). Oil.
- (b). Grease.
- (c). Graphite powder.
- (d). None.

If no lubricant is used it is better to rewrite the question like Example 32.

**Example 32** Which of the following components must **NOT** be lubricated during service?

- (a) Elevator trim actuator cable drum  
(and three other plausible components as distractors.)

#### 15. Verbosity

Consider the following:

*The use of too many words when less will express the idea to be conveyed as clearly, is to be avoided whenever possible to ensure clarity of expression to assist the candidate to understand the intent of the question being asked of him or her.*

If you had trouble understanding the paragraph, the following examples are clearer:

- To help a candidate understand a question, do not use many words when a few words will express the meaning clearly.
- The candidate will understand the question more easily if it is short rather than long, and is clearly expressed.

#### 16. Responses Leading to Another

These are responses where information on one response leads the candidate to the correct response. Avoid them, since they assist weak candidates.

## 17. Punctuation and Grammar

Inconsistent punctuation can confuse the candidate. Therefore, be consistent when using punctuation marks, upper and lower case letters, etc.

In general, you should write questions using normal conversational English. However, some areas need variation, examples of which are listed below for guidance. It is important that any variations are used consistently throughout each examination.

## 18. Upper Case Letters

Use upper case particularly where the manufacturer or operator uses these terms or abbreviations.

Use upper case letters for:

- a. Circuit breaker or fuse identification NO 2 ENG IGN
- b. Nomenclature of identified lights ENG OIL PRESS 2
- c. Title of switch position or control position ON, OFF, RICH
- d. System mode of operation GROUND, FLT, ET or AS
- e. NOT in the stem of a negative question.

## 19. Underlining

In general, only use underlining to highlight words that would change the sense of the question if misread.

**Example 33** NOT in the stem of a negative question

**Example 34** Downstream where upstream would be the more likely word or either could be used.

## 20. Punctuation for Stems that Are Questions

For a stem that is a question:

- Place a question mark at the end of the stem
- Start each response with a capital letter
- Use a full stop after each response.

## 21. Punctuation for Complete-the-statement Style Questions

For "complete the statement" style questions, ensure:

- A colon is used at the end of the stem
- Lower case letters are used at the start of each response
- Responses flow from the stem and do complete the statement.

Make sure the stem is adequate so that when the candidate has read the stem and responses, he or she is fully conversant with the information required.

## **22. Multi-choice Examination Checklist**

### **All Questions**

1. Numerical responses
2. Homogeneity
3. Length
4. Key words
5. **NOT** questions
6. Multi-response questions
7. Subjective questions
8. Operator's policy
9. Mutually inclusive responses
10. Telegraphese
11. Negative responses
12. Verbosity
13. Responses leading to another
14. Punctuation and grammar

### **For Question Style Stems**

1. Question mark at end of stem
2. Capital letters at start of each response

### **For Complete-the-statement Style Stems**

1. Colon at end of stem
2. Lower case letters at start of each response
3. Responses flow from stem
4. Stem adequate to orientate candidate to required information

## CHAPTER 7 – APPROVAL OF MAINTENANCE TRAINING COURSES

### 7.1 Courses to be Approved

This chapter provides the procedures used by staff to approve maintenance training courses.

- Paragraph 8.3(a) details the procedures for assessing individual courses conducted by Indonesian and overseas training organizations, airlines and manufacturers.
- Paragraph 8.3(b) details the procedures for evaluating a training course against a Certificate of Approval (C of A) holder's quality control procedure manual to ensure that the manual is acceptable under Part 147.
- Paragraph 8.3(c) details the procedures for assessing the ongoing training required to maintain and update a licence holder's skills and knowledge under CASR Parts 121.375 and 135.375.

Application for approval is to be made on DAAO Form 147-02. A copy of this form is in Attachment 2 of this chapter.

### 7.2 Instructors and Examinations

#### (a) Instructors

CASR Part 147.17 specifies the qualifications, experience and continued training of instructors. When assessing instructors, the inspector should ask the following questions:

- Are instructors appropriately licensed?
- Are unlicensed instructors otherwise qualified and are they confined to teaching basic subjects such as physics etc?
- Have all instructors completed training in instructional techniques?
- Are all instructors evaluated for satisfactory instructional technique, technical accuracy and conformance to course objectives
- Are all instructors taking part in a structured professional development programme?

#### (b) Examinations

CASR Part 147.55 requires that examinations be developed in accordance with the procedures approved by DGCA. When assessing course examinations, the inspector should ask the following questions:

- Are examinations written, oral or a combination of both?
- Do all examinations require a pass grade of 70%?

- Is there evidence that successful students have passed each part of the course?
- What are the procedures for students who fail the final examination?

### 7.3 Approval Procedures

#### (a) Individual Courses Conducted by Indonesian and Overseas Training Organisations

If an overseas organisation wants to conduct in Indonesia a course already approved for presentation overseas, DGCA must inspect the Indonesian facility, training aids, syllabus, etc to ensure that they are adequate, in the same way as it does for an Indonesian organisation.

The assessment is based on:

- (i) The technical material supplied by the training organisation — that is, the courseware, which includes:
  - Course syllabus
  - Topic details
  - Instructional aids
  - Student notes to be provided
  - Examinations
  - Description of the facilities
- (ii) Consideration of the licence categories - that is:
  - The scope and depth of the material supplied
  - Whether the training covers the privileges of the relevant licence category.

Note: The courseware for all approved courses must be updated and amended if any changes occur to aircraft/engines/systems to which the course applies

#### Assessment Questions

When assessing a course, the assigned inspector should ask the following questions:

- Are the facilities provided by the organisation adequate to conduct the course?
- Is the course's instructional time adequate, taking into account the complexity of the aircraft/engine and/or systems?
- Is the content, scope and depth of the course equal to the applicable DGCA syllabus?

- Does the course cover those aspects of the aircraft/engines/systems relevant to the privileges of the licence?
- Is the course's system of assessment (examination) adequate and comparable with the system DGCA uses for similar aircraft/engines/systems?

#### Procedure for Assessing Courses

The assessment of courses conducted by Indonesian and Overseas training organisations, airlines and manufacturers should be completed within 10 working days from receipt of the request for assessment, subject to the receipt of all necessary courseware.

#### Assessing the Request

- It is the responsibility of the assessing inspector to confirm that the application meets the criteria set out in the above Assessment Questions.
- If the assessed course is unacceptable:
  - (i) Prepare a critique detailing all deficiencies and the rectification required before the approval process may proceed.  

Note: Courses may be approved subject to additional examination or other conditions
  - (ii) Send the critique to the training organisation.
- If the course is acceptable:
  - (i) Enter approval details in the Approved Course Register
  - (ii) Prepare the correspondence that confirms that the training course is acceptable and send it to the training organisation
  - (iii) For overseas courses only, prepare a Course Approval Certificate and send it to the training organisation.

### **(b) Evaluating the Applicants Quality Control Procedures Manuals**

#### Purpose of the Evaluation

This section describes the processes for evaluating quality control procedures manuals of organisations that apply for approval of maintenance training under CASR Part 147.

The applicants' quality control procedures manual can be titled:

- A Quality Control Procedures Manual; or
- A Policy and Procedures Manual; or
- Another appropriate name.

DGCA inspectors must have a copy of the procedures manual during the surveillance of the organisation.

## Evaluation Questions

When evaluating an organisation's procedures manual, the inspector should ask the following questions.

Does the manual include:

- The name and address of the training organisation and its responsibilities as an approved training school?
- Organisational structure and responsibilities (including that of the internal audit) of the employees in each position?
- A distribution list of copies of the manual?
- A list of approved locations, if applicable, including a plan of the training examination rooms, complete with dimensions?
- If the applicant conducts courses utilising a client's facilities, the procedures for ensuring that he or she obtains prior approval from DGCA for the use of the facility?
- A list of approved courses?
- A list of authorised examiners, including their Authority number?
- A statement that all instruction shall be based on current data?
- The method by which the organisation maintains the currency of its publications — that is, does it have a distribution list for amendments?
- A procedure of how to gain the DGCA's approval for training course?
- An examination library consisting of three separate examinations, or an examination library containing sufficient questions to construct three separate papers with no more than 50% of questions from the preceding two examinations?
- A description of the procedure for the creation and maintenance of the examinations that ensures that the requirement for a 50% change from the two preceding examinations is adhered to (matrix)?
- A statement that the pass marks is 70%?
- A statement to the effect that a candidate who fails an examination is permitted only one re-examination unless further training is undertaken?
- A description of the organisation's system of examination analysis?
- The notification of results (approved by EA holder) to the Authority (Sno paper used and analysis)?
- A statement that answer papers are kept for a minimum of 24 months?

- A statement of how the security of examination libraries, existing papers and candidates' personal files are maintained?
- Copies of the forms and certificates associated with the proposed training?
- A procedure on how amendments to the manual are to be carried out — that is, vertical dark lines identifying amended areas etc, issue number and/or A/L number on each page?
- A page numbering system for the manual? For example, page 7-100 for page 7 out of 100 pages.
- The facility to record amendments to the manual?
- A description of the audit system (internal audit) applying to the system of quality control as required by CASR?
- An overview of the proposed training for engineers which should contain a description of
  1. The training programme?
  2. Entry criteria (if applicable)?
  3. The accommodation (includes seating, lighting and ventilation)?
  4. Training aids and equipment?
  5. The course/s objectives?
  6. The course/s syllabi?
  7. The course notes (including method of amending and keeping them current)?
  8. Procedures on how the course records and results are kept?
  9. The conduct of the examination?
  10. Examination security?

#### Finalising the Evaluation

When the evaluation of the manual is complete:

- Send a letter to the organisation notifying it that the manual is considered acceptable
- Notifying the specified limitations or other recommendations that should be included in the approval.

#### **(c) Parts 121, 135 and 145 Training**

An application for issue of an Air Operators Certificate (AOC) and Approved Maintenance Organisation (AMO) is assessed to make sure that the organisation meets the requirements specified in CASR parts 121, 135 and 145, as applicable. Under these Parts, operators must maintain/update their maintenance staff's knowledge by training them.

Parts 121, 135 and 145 training is associated with:



- New or different aircraft/engines/systems
- Modifications to existing aircraft/engines/systems
- Periodic (recurrent) training.

To ensure that the requirements of Parts 121 and 135 are met, training programmes for maintenance staff are subject to the approval of the DGCA.

#### Assessment Guidelines

- Under Parts 121, 135 and 145, training does not necessarily require an instructional session in a formal classroom. In fact, some changes to aircraft/engines/systems are so minor that the requirement for training can be met by the provision of a leaflet to each of the company's staff detailing what they need to know. Activities such as the distribution of leaflets constitute a training programme. However, for such an activity to be acceptable, DGCA must approve the proposed processes and procedures for the dissemination of training information as being adequate for the situation.
- For more substantial variations to aircraft/engines/systems, a detailed training package that includes formal training, training notes and an assessment (by examination or similar) may be appropriate.
- If the programme requires formal instruction in excess of a half-day, the proposed training package must be assessed by DGCA.
- The assigned inspector is responsible for maintaining the register of courses approved under this process.
- The operators (nominees) are responsible for notifying the assigned inspector of changes to their aircraft in service. They must notify any change that has an impact on airworthiness, maintenance requirements or techniques. The notification must outline their programme for training staff. When DGCA is satisfied that the proposed programme is adequate, the operator must be notified in writing.
- The operator is responsible for maintaining a register/record of its training programmes and the names of staff who participate in training.

#### Assessment Questions

When evaluating whether an organisation's Part 121 or 135 training programme is appropriate for its purpose, the inspector should ask the following questions.

#### Target Group

- Is the proposed training for a single maintenance category?

- If so, is the single maintenance category appropriate or should related categories be included?

#### Scope/Depth of Training

- Is the scope and depth of the training adequate?
- Does the proposed programme adequately address the technical detail with respect to the privileges of the licence?

#### Formal Instruction

- Does the proposed training include more than half a day of formal training?

Note: This criterion of "in excess of half a day of formal instruction" is a guide only. Each proposal needs to be assessed individually. However, anything in excess of the half-day figure necessitates a modification to courses already approved.

#### Use of Examples

- Does the proposed programme provide physical access to examples of the topic — that is, actual examples of hardware, changed documentation or photographs/diagrams as appropriate?

#### Qualified Presenter

- Does the proposed programme need to be presented by an appropriately qualified person?

#### Programme Timetable

- Is the proposed timetable adequate for proper completion of the programme prior to the introduction into service of the subject aircraft/engines/systems?

#### Incorporation of Data into Applicable Type Course(s)

- Does a procedure exist for incorporating the data into the applicable Type course(s), if necessary?
- Has it been implemented?

#### The Name of a Contact Person at the Organisation

- Does the manual give the name and other contact information of a position responsible for liaison in the organisation?

#### Procedure for Part 121, 135 and 145 Training

The operator is responsible for recording the names of personnel who have been trained under these programmes.

The assessment of the training programme should be completed within 10 working days from receipt of the request for assessment, subject to the receipt of all necessary courseware.

#### **7.4 Continued Surveillance and Monitoring**

Surveillance and monitoring of training organisations is to be carried out in accordance with the Checklist and Inspection Record DAAO Form 147-01 for Approved Maintenance Training Organization (AMTO) 147 and Checklist form DAAO 65.19 for Operator Maintenance Training Program (Non AMTO).

#### **7.5 Records**

A file shall be maintained for each training organisation approved under Part 147. Copies of DAC Forms 147-01 and 147-02 shall be retained on these files so as to provide a complete record of approvals granted and inspections carried out.

Attachment 1

**REPUBLIC OF INDONESIA**  
**DEPARTMENT OF COMMUNICATION**  
**DIRECTORATE GENERAL OF AIR COMMUNICATIONS**

***CERTIFICATE of APPROVAL***

Number : 147/0xxx

This certificate is issued to : .....

Whose business address is : .....

Location of facilities : .....

Upon finding that this organization complies in all respects with the requirements of the Civil Aviation Safety Regulations relating to the establishment of an approved organization, and is empowered to operate as an:

**AIRCRAFT MAINTENANCE TRAINING ORGANIZATION**

With the following ratings : .....

BHINNEKA TUNGGAL IKA

as specified in Operations Specifications No. 147/xxx/yy

This approval is not transferable and shall continue in effect for a period of one year from the date of issue unless canceled, suspended or revoked by the Director General Any major change in the basic facilities, or in the location thereof, shall be immediately reported to the Director General.


Date of Issue : **On behalf of the Director General of Air Communications,**

**Month Day, Year**

**Director of Airworthiness Certification**

DAC FORM 147-01 (07-01)

## Attachment 2

 <p style="text-align: center;"><b>DEPARTMENT OF COMMUNICATION DIRECTORATE GENERAL OF AIR COMMUNICATIONS DIRECTORATE OF AIRWORTHINESS CERTIFICATION</b></p> <p style="text-align: center;">Karya Building 22<sup>nd</sup> floor, JL. Medan Merdeka Barat No. 8 JAKARTA 10110 - INDONESIA Phone : +62-21 - 3506664, 3506665; Fax : +62-21 - 3506663 Email : <a href="mailto:daedsku@cbn.net.id">daedsku@cbn.net.id</a></p>						
<b>APPLICATION FOR APPROVAL FOR OF AN AIRCRAFT MAINTENANCE TRAINING ORGANIZATION</b>						
INSTRUCTIONS: Type or print. Submit original to DGCA office. If additional space is required, use attachments						
<b>1. NAME OF ORGANIZATION</b>			<b>2. TELEPHONE NO:</b>			
<b>3. ADDRESS</b>			<b>4. TRAINING DIRECTOR</b>			
<b>5. LOCATION OF FACILITIES (Check as applicable)</b>			<b>6. ORGANIZATION STATUS</b>			
<input type="checkbox"/>	ON AIRPORT	<b>ADDRESS</b>	<input type="checkbox"/>	PUBLIC	<input type="checkbox"/>	PRIVATE
<input type="checkbox"/>	IN CITY		<input type="checkbox"/>	NON-PROFIT		
<input type="checkbox"/>	IN SUBURBS		<input type="checkbox"/>	OTHER:		
<b>7. APPLICATION SUBMITTED FOR</b>			<b>8. BASIC AND RATING APPLIED FOR AND MIN. TOTAL HOURS PER COURSE</b>			
	ORIGINAL CERTIFICATE		<b>CATEGORY</b>	<b>TOTAL HOURS</b>		
	CHANGE IN RATING		AIRFRAME	<b>BASIC</b>	<b>RATING</b>	
	CHANGE IN OWNERSHIP		ENGINE			
	CHANGE IN LOCATION, FACILITIES AND EQUIPMENT		RADIO			
	ADDITIONAL RATING		INSTRUMENT			
	ADDITION OF BASIC		ELECTRICAL			
	OTHER (Specify):					
<b>9. ATTACHMENTS</b>						
	A. TRAINING PROCEDURES MANUAL (If Organization is Approved)			E. PHOTOGRAPHS OF FACILITIES		
	B. PROPOSED CURRICULUM			F. LIST OF REQUIRED PRACTICAL PROJECTS		
	C. LIST OF FACILITIES AND EQUIPMENT TO BE USED			G. SCHEDULE OF REQUIRED TESTS		
	D. LIST OF INSTRUCTORS, NAMES, CERTIFICATES, TYPE, AND RATING HELD, AND SUBJECT TO BE TAUGHT			H. COPY OF STUDENT RECORD SYSTEM		
				I. OTHER (Specify)		
<b>10. APPLICANT'S CERTIFICATION</b>						
<b>NAME OF OWNER (Include name(s) of individual owner, all partners, or corporation name giving State and date of incorporation)</b>						
I hereby certify that I have been authorized by the organization identified in item 1 to make this application and that statement and attachments hereto are true and correct to the best of my knowledge.						
<b>DATE OF APPLICATION</b>		<b>NAME AND TITLE</b>		<b>AUTHORIZED SIGNATURE</b>		
<b>11. CERTIFICATION ACTION (FOR DGCA USE ONLY)</b>						
<b>ACTION</b>		<b>CERTIFICATE NO</b>	<b>CATEGORY</b>	<b>TOTAL HOURS</b>		
<input type="checkbox"/>	APPROVED		AIRFRAME	<b>BASIC</b>	<b>RATING</b>	
			ENGINE			
<input type="checkbox"/>	DISAPPROVED		DAC FORM 147-01	RADIO		
			INSTRUMENT			
			ELECTRICAL			
<b>REMARKS</b>						
<b>12. DATE CERTIFICATE ISSUED</b>		<b>13. NAME</b>		<b>14. ISSUING OFFICIAL'S SIGNATURE</b>		

**Attachment 3**

AIRCRAFT MAINTENANCE TRAINING ORGANIZATION INSPECTION CHECK LIST AND INSPECTION RECORD				
INSTRUCTIONS: The items listed below are applicable to certification inspection and/or surveillance. Complete each item. If an item is not applicable enter "N/A"				
NAME OF ORGANIZATION		CERTIFICATE NO.	TYPE OF INSPECTION AND DATE	
			SESSION	SURVEILLANCE
			DAY	CERTIFICATION
			EVENING	
ORGANIZATION OR TRAINING CLASSIFICATIONS				
CATEGORY	ORGANIZATION APPROVED		TRAINING APPROVED	
BASIC				
RATING				
OTHER:				
ADDRESS AND LOCATION:			OTHER LOCATION:	
A. GENERAL REQUIREMENTS				
DESCRIPTION		SATISFACTORY		REMARKS
		YES	NO	
<b>1. TRAINING PROCEDURE MANUAL (TPM)</b>				
a A system for amendments				
b Organization and Personnel Chart				
c Attendance				
d Examinations				
e Graduation Certificates				
f Instructor Qualifications				
g Facilities				
h The Equipment for Training				
i The Class Room Size/25 person				
<b>2. QUALITY CONTROL (QC)</b>				
a. The policy and procedures described in TPM				
b. Individual Responsible for QC				
c. The System Effectiveness				
<b>3. CURRICULUM</b>				
a Curriculum approved by DGCA				
b Number of hours per subject				
c Course objectives				
d Indicating the level of competency				
e Skills to be Acquired				
f Ratio of Theory to Hand-on Time				
g Amendments of Curriculum				
<b>4. RECORD KEEPING</b>				
a The policy and procedures described in TPM				
b Organizations Maintain a Current record for each Student.				
<b>5. ATTENDANCE</b>				
a Training Schedule				
b Present Enrollment per Weeks				
c Grade for all courses including quizzes, test and practical projects				
<b>6. EXAMINATIONS</b>				
a Validity of Examinations				
b Course Objectives of Examinations				
<b>7. GRADUATION CERTIFICATES</b>				
a The Name and Location of The Facility				
b The Type of Training				
c The Students Full Name				
d The Date of Course Completion				
e An Embossed Raised Seal				
f The Signature of Authorized Official				
g The DGCA Course Approval Number				
h List of Issued Certificate				
<b>8. INSTRUCTOR</b>				
a Prerequisites of Instructor				
b Trained in Instructional Techniques				
c Specialist instructor experienced				
d System for the Evaluation of Instructor				
e Recurrent training for Instructor				

<p><b>9. FACILITIES</b></p> <ul style="list-style-type: none"> <li>a Proper air conditioning, lighting and ventilation</li> <li>b Isolated from All Interruption</li> <li>c Classroom and Shop space suitable for courses given and number of Students</li> <li>d Instructional Aids</li> <li>e Library</li> <li>f Training uses facilities other than its own.</li> </ul> <p><b>10. ADVISORY COMMITTEE</b></p> <ul style="list-style-type: none"> <li>a Duties and Responsibilities described in TPM</li> <li>b Policies and Procedures for Explaining changes to The Course in detail</li> </ul>			
<b>B. BASIC TRAINING REQUIREMENT</b>			
<ul style="list-style-type: none"> <li>1. Procedures of student prerequisites</li> <li>2. Curriculum of Training Cover the Subjects and Item prescribed in the Applicable DGCA Curriculum guide</li> <li>3. Reference material for Training</li> <li>4. Training Aids Suitable for The Completion of practical projects as part of the curriculum</li> <li>5. Procedures of an Aircraft with a valid C of A for Training Purposes</li> <li>6. Policy and Procedures the Shop Facilities simulate an actual working environment</li> <li>7. Equipment, Facilities and Procedures on:                             <ul style="list-style-type: none"> <li>• Hangar</li> <li>• Sheet Metal Shop</li> <li>• Woodworking Shop</li> <li>• Engine Run-Up Area</li> <li>• Avionic and Instrument Shop</li> <li>• Electrical Shop</li> </ul> </li> </ul>			
<b>C. RATING TRAINING REQUIREMENT</b>			
<ul style="list-style-type: none"> <li>1. Procedures of student prerequisites</li> <li>2. Curriculum of Training Cover the Complete Aircraft Type, Engine, ProPEL-Mler and so on.</li> <li>3. Reference material for Training</li> <li>4. Equipment, Facilities and Procedures on:                             <ul style="list-style-type: none"> <li>• Simulator Area</li> <li>• Aircraft</li> <li>• Hangar or Shop</li> <li>• Training Aid Mock-Ups</li> </ul> </li> </ul>			
<b><u>REMARKS AND ITEMS TO FOLLOW UP ON NEXT INSPECTION</u></b>			
<b>INSPECTION RESULTS</b>			
SATISFACTORY	UNSATISFACTORY	OTHER:	
<b>INSPECTORS SIGNATURE AND STAMP</b>			
<div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="border-bottom: 1px solid black; width: 30%;"></div> <div style="border-bottom: 1px solid black; width: 30%;"></div> <div style="border-bottom: 1px solid black; width: 30%;"></div> </div>			

**Attachment 4**



**OPERATOR MAINTENANCE TRAINING PROGRAM (NON AMTO)  
INSPECTION CHECKLIST/REPORT**

1. Operator name	2. Date	3. Location
4. Type of training <input type="checkbox"/> Basic Aircraft Knowledge Training <input type="checkbox"/> Type/Group Rating Training <input type="checkbox"/> Other		
5. Name/title of training		

S=Satisfactory; U=Unsatisfactory; P=Potential; I=Information; N=Not Observed

<b>A. TRAINING PROCEDURE</b> 1. ___ Appropriate Title(s) 2. ___ List of Effective Pages 3. ___ Record of Revisions 4. ___ DGCA Approved 5. ___ Sufficient Detail 6. ___ Objective(s) Stated 7. ___ Currency  <b>B. TRAINING CURRICULUM</b> 1. ___ Curriculum approved by DGCA 2. ___ Number of hours per subject 3. ___ Course objectives 4. ___ Indicating the level of competency 5. ___ Skills to be Acquired 6. ___ Ratio of Theory to Hands-on Time 7. ___ Amendments of Curriculum 8. ___ Currency  <b>C. INSTRUCTOR COURSEWARE</b> 1. ___ Title 2. ___ Detail 3. ___ Usability/Practicality 4. ___ Consistency 5. ___ References 6. ___ Validation	<b>D. STUDENT COURSEWARE</b> 1. ___ Consistency 2. ___ Detail 3. ___ Validation 4. ___ Prerequisites of student  <b>E. TRAINING FACILITIES AND ENVIRONMENT</b> 1. ___ Classroom Space 2. ___ Storage Space 3. ___ Instructor Areas 4. ___ Lighting 5. ___ Noise and Temperature 6. ___ Library 7. ___ Isolated from All Interruption  <b>F. INSTRUCTORS</b> 1. ___ Training 2. ___ Knowledge 3. ___ Instructional Technique and Delivery 4. ___ Adherence 5. ___ Evaluation  <b>G. TRAINING AIDS AND EQUIPMENT</b> 1. ___ Instructions for Use 2. ___ Condition 3. ___ Fidelity 4. ___ Instructional Aids 5. ___ Material training and currency	<b>H. RECORDS</b> 1. ___ The policy and procedures described in CMM 2. ___ Maintain a Current record for each Student 3. ___ Publications  <b>I. INSTRUCTOR/CHECKER</b> 1. ___ Staffing 2. ___ Training and Qualification 3. ___ Standardization 4. ___ Level of Activity  <b>J. ORAL AND PRACTICAL TEST STANDARDS</b> 1. ___ Conform to Accepted Int'l Standards 2. ___ Comply with Regulations 3. ___ Re-Examinations  <b>K. QUALITY CONTROL</b> 1. ___ Training Adequately Monitored 2. ___ Utilizes Progress Evaluations 3. ___ Training Folders  <b>L. EXAMINATIONS</b> 1. ___ Validity of Examinations 2. ___ Course Objectives of Examinations
--	--	--

Remarks (Continue on back if necessary)

Overall result:     Satisfactory  
                            Unsatisfactory

Inspectors name and signature



## CHAPTER 8 - GRANT OF PERSONNEL LICENCES AND RATINGS

### 8.1 General

This chapter describes the procedures for the issue, renewal and extension of all personnel licences.

### 8.2 Receipt of Applications

Submitted or received applications are registered by sign and numbered receipt sheet / form.

### 8.3 Fees

Fees will be charged according to applicable rules and directly paid to the assigned finance person.

### 8.4 Approval for Issue

#### (a) Issue Basic Certificate Procedure:

- (1) Submitted the application for a Basic Certificate issue, must complete the following:
  - (i) Basic examination result.
  - (ii) DAAO Form 65.02 Application for License and Aircraft Type Rating
  - (iii) Copy of ID or Passport
  - (iv) Certificate of Competency, approved by authorized person, e.g.:
    - DAAO Form 65.06 for A1.
    - DAAO Form 65.07 for A2.
    - DAAO Form 65.08 for A3.
    - DAAO Form 65.09 for A4.
    - DAAO Form 65.10 for C1.
    - DAAO Form 65.11 for C2.
    - DAAO Form 65.12 for C4.
- (2) Last academic certificate and formal education certificate.
- (3) Basic Aircraft Technical Knowledge Training Certificate, if any.
- (4) Photo colour 4X6

#### (b) Issue Aircraft Maintenance Engineer Licence Procedure:

Submitted the application for Aircraft Maintenance Engineer Licence issue, must complete the following:

- (1) DAAO Form 65.02 Application for License and Aircraft Type Rating
- (2) Copy of ID or Passport
- (3) Copy of Basic Certificate.

- (4) Copy of Certificate Training
- (5) Schedule Type Experience, Approved by authorized person.
- (6) Copy of License for recognized foreign license.
- (7) Verification License letter from ICAO contracting State for recognized foreign license.
- (8) Photo colour 2X3

Issue, or re-issue may not stay here depending on the results of the question below of the License or additional rating. When applicant has satisfactorily met all requirements for the License and/or rating sought, and the DAAO Form 65.02 has been completed, the License and/or rating will be issued.

- (1). Prepare a new License for applicant
- (2). Complete all blocks including a License number
- (3). When a rating needs to be added, enter additional rating on a new License or add to the existing.
- (4). Provide applicant with completed License
- (5). Collect fee for the License

**(c) Renewal AMEL procedure:**

Submitted the application for renewal Aircraft Maintenance Engineer Licence, must complete the following:

- (1) DAAO Form 65-02 Application for License and Aircraft Type Rating
- (2) Copy certificate training.
- (3) Personnel Experience Log Book.

Renewal of license. The applicant must meet any recency requirements of CASR 65 to be eligible for renewal

## **8.5 Discrepancies or Ineligibility**

- (1). If a discrepancy that cannot be immediately corrected exists in any of the documents, return the application and all submitted documents to the applicant. Inform the applicant of the reasons why the recognition certificate/license cannot be issued and explain how the applicant may correct the discrepancies.
- (2). If the applicant is not eligible for recognition certificate/license sought, inform the applicant of the reasons for ineligibility and explain how the applicant may obtain the recognition certificate/license.

## **8.6 Records**

All issuance of basic certificate and licence will recorded in personal file of each applicant.

## Attachment 1

C1. BASIC CERTIFICATE		C2. TYPE RATING	
Number of Certificate		CATEGORY	TYPE/GROUP RATING
A1		AIRFRAME	
A2			
A3			
A4		ENGINE	
C1		RADIO	
C2		INSTRUMENT	
C4		ELECTRICAL	

C3. LICENSE FROM ICAO CONTRACTING STATE (*Recognition of foreign licenses only*)

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**D. SPECIFIC TRAINING**

D1. BASIC KNOWLEDGE TRAINING :

NAME OF SCHOOL	PLACE	DURATION	YEAR	RESULT

D2. AIRCRAFT TYPE RATING TRAINING :

NAME OF SCHOOL	PLACE	DURATION	YEAR	RESULT

D3. RECURRENT TRAINING

NAME OF TRAINING	PLACE	REMARKS

<b>E. CONFORMITY REQUESTED AND STATEMENT</b>					
<b>E1. BASIC CERTIFICATE REQUESTED</b>			<b>E2. RATING/LICENCE REQUESTED</b>		
Type of Certificate	Exam Number	Attendant Number	CATEGORI	GROUP	TYPE RATING
<b>E3. CHANGE OF ADDRESS OR OTHER REQUESTED</b>					
Reference:					
<b>I certify that the statements made by me on this Application are true</b>					
Date of Applicant	Name of Applicant			Signature	
<b>F. VERIFICATION STATEMENT (Company Authorized Personnel/Chief Inspector)</b>					
<b>MEAN OF COMPLIANCE</b>					
<input type="checkbox"/> SCHEDULE TYPE OF EXPERIENCE (STE)					
<input type="checkbox"/> PERSONNEL EXPERIANCE LOG BOOK (PEL)					
<input type="checkbox"/> Other .....					
Remarks or additional information:					
I here certify by that person mention above is has met the experience requirements and CASR Part 65 for an Aircraft Maintenance Engineer Licence in the type or Group					
Date	Name and Title			Signature	
<b>G. CERTIFICATION ACTION (For DGCA use only)</b>					
<b>EVALUATION TASK</b>					
Date of applicant :					
Supporting documents : <input type="checkbox"/> STE's/PEL's <input type="checkbox"/> Certificate of Training <input type="checkbox"/> ID/Passport <input type="checkbox"/> Photo					
<input type="checkbox"/> Other .....					
Type of Certification :					
<input type="checkbox"/> Endorsement of Training		Name of Organization:			
<input type="checkbox"/> Examination		No Exam:	No of attendant:	Result:	
<b>RECOMMENDATION</b>					<b>DGCA OFFICIAL SIGN/STAMP</b>
<input type="checkbox"/> Initial/Additional Rating		Basic Certificate or Type Rating:			
<input type="checkbox"/> Renewal		Valid up to:			
<input type="checkbox"/> Change of Address or Other .....					
Remarks:					
<input type="checkbox"/> APPROVED		On behalf Director Airworthiness and Aircraft Operation			
<input type="checkbox"/> REJECTED					
		_____ Deputy Director of Maintenance			

## CHAPTER 9 - RECOGNITION OF INDONESIAN MILITARY COMPETENCE

### 9.1 General Policy

It is the general policy of DGCA to recognise appropriate experience, knowledge and skill gained in the Indonesian military.

In all cases where such recognition is granted, military personnel must pass an examination in Air Law and such other examinations or tests as may be considered necessary.

### 9.2 Military Aircraft Engineers/Technicians Competence

#### General process

- (1). A license or certificate technicians or equivalents certificate military technicians may be issued on the basis of military competence to an applicant who is the holder of a military technician's license and who meets the requirements of CASR 65 and the implementing standards.
- (2). Aircraft category, type rating or group rating for which the military technicians is qualified, may be added to a new or existing License issued under CASR 65.

#### Eligibility

- (1). An applicant for a technicians military competence must meet the requirements of CASR 65 and implementing Standards.
- (2). The applicant for AME License must:
  - i. Have been on active technicians status within the last 3 years.
  - ii. Pass knowledge test in accordance with the CASR 65.
  - iii. Hold an aircraft category, type rating or group rating training certificate.

#### Acceptable records

Official military records of maintenance experience and qualifications are unique to each branch of the maintenance activity. These official records should be accepted as indicator of experience with the procedures, practices, materials, tools, machine tools, and equipment generally used in constructing, maintaining, or modifying airframes, powerplants, or avionic equipment.

The following documents can be satisfactory evidence for the purpose indicated:

- (1). An original of a copy of training certificate.
- (2). A certified armed force logbook.
- (3). An official record of satisfactory accomplishment of the category, type rating or group rating maintenance experience during 12 calendar months proceeding the months of application.

**Knowledge Test**

An applicant for the basis of military competence, who has been on duty as military technicians/engineers within the preceding 3 years, shall be required to pass the knowledge test on the appropriate part of the CASR 65. If the DGCA inspector decides, a written theoretical knowledge test for aircraft category, type rating or group ratings needs to be passed for recognition for military competence.

**9.3 Procedures for the issue of recognition License with Aircraft Maintenance Engineer (AME) License on base on Military Competence according to CASR 65.**

When the applicant has satisfactory met all requirement for the License and/or Rating sought, and the DAAO Form 65.02 has been completed, the License and/or rating will be issued refer to the chapter 9 of this part.

## CHAPTER 10 – RECOGNITION A FOREIGN LICENSE

### 10.1 General Policy

It is the general policy of DGCA to recognise licenses issued by contracting State's provided the foreign licence is valid and includes ratings for types on the Indonesian register.

In all cases where such recognition is granted, applicants must pass an examination in Air Law and such other examinations or tests as may be considered necessary.

### 10.2 Recognition of Aircraft Maintenance Engineers Licensed

#### General Process

A recognition certificate or an aircraft maintenance engineer license may be issued on the basis a foreign license, when the foreign license is issued by the appropriate authorities of the International Civil Aviation Organization (ICAO) member States.

#### Recognition Processes

Recognition of foreign license by reliance upon the licensing system of another ICAO Contracting State. For an individual recognition by reliance upon the licensing system of another ICAO Contracting State, there must be an agreement between the DGCA and the other contracting state.

#### Verify the Foreign License

One of the first procedures that need to be performed is to verify with the foreign CAA, the authenticity of the license and certificate presented by the DGCA verify letter to the foreign CAA, requesting to return the letter when verified.

#### Conduct of knowledge test

The theoretical knowledge test on Air law will be conducted in written format.

#### Certificate/License Issued

In case of an individual recognition, a recognition certificate/license will be issued to the holder of a valid license issued by an ICAO member state.

#### Type Rating or Group Rating Issued

A recognition certificate/license issued on the basis of foreign license recognition must bear the CAA equivalent ratings on the foreign license. These ratings will be recognition and entered on the recognition license provided the applicant complies with the relevant requirement of CASR 65.

Only valid and current ratings endorsed on the foreign license can be recognized.

### **Duration**

- (1). The recognition license will be valid for one year, provided the foreign license remains valid.
- (2). The converted license and rating/group rating in the license have the same validity period as the licenses, ratings and authorisations mentioned in CASR 65.

## **10.3 Procedures for the issue of recognition License with Aircraft Maintenance Engineer (AME) License on base on foreign licenses according to CASR 65.**

### **Verify the Foreign License**

The applicant for a recognition license needs to provide all information about his/her foreign license. This will enable the DGCA verify with the foreign CAA, the authenticity of the license presented. The DGCA sends the Verify letter to the foreign CAA, requesting to return the letter, when verified.

### **Schedule Appointment**

As soon as the letter verified has been received from the foreign CAA and the foreign license has been verified by the foreign CAA, advise the applicant to bring the following documents to the appointment:

- (1). A properly completed DAAO Form 65.02.
- (2). A properly the verified letter from foreign CAA.
- (3). The current foreign license.
- (4). Copy of ID or Passport.
- (5). An acceptable form of photo identification.

DGCA Inspector will collect and review the documents and records listed above.

- (1). Review Application
  - i. Check the application for accuracy, using the instructions attached to the form.
  - ii. Verify applicants identify: inspect acceptable of identification.
  - iii. Compare the identification with the personnel information provided on the DAAO Form 65.02.
  - iv. If the applicants identify appears to be different from the information on DAAO Form 65.02, or it appears that an attempt at falsification has been made, do not continue with this task.
- (2). Establish Eligibility; determine if the applicant meets the specific eligibility requirements of CASR 65:
  - i. Ensure the applicant present a valid and current foreign AME License.
  - ii. Applicant show evidence of the minimum experience.(4 years)



- iii. Once the general requirements are completed signed DGCA Form 65.01, for endorsement for the knowledge Test.
- iv. Explain to the applicants, that after the successful completion of the knowledge test he/she must return to the office for the endorsement of the Ratings/License.

**Discrepancies or Ineligibility**

- (3). If a discrepancy that cannot be immediately corrected exists in any of the documents, return the application and all submitted documents to the applicant. Inform the applicant of the reasons why the recognition certificate/license cannot be issued and explain how the applicant may correct the discrepancies.
- (4). If the applicant is not eligible for recognition certificate/license sought, inform the applicant of the reasons for ineligibility and explain how the applicant may obtain the recognition certificate/license.

**Issued of Recognition Certificate/License.**

After verifying that all CASR requirements are met, the DGCA technical office staff will issue a recognition certificate/license with AME Privileges, the License and/or rating will be issued refer to the chapter 9 of this part.

## CHAPTER 11 – QUALITY CONTROL

### 11.1 Responsibility for Quality

All staff are responsible for the quality of their work

### 11.2 Quality Indicators

The following occurrences are indicative of inadequate quality control and can serve as a measure of the quality of service provided to the industry by DGCA personnel licensing staff. Whenever any of the following occurs a record shall be kept for the purpose of measuring quality of service.

- (1). **Complaints from applicants;** Legitimate complaints from licence holders are an indication of a poor quality of service. All such complaints received shall be investigated. Verbal complaints are to be noted and a written report prepared. This report must be dated and name the complainant and the describe the complaint. Copies of all legitimate complaints shall be kept on the Complaints file and the appropriate personal file. Corrective action reports appropriate to each complaint shall be similarly filed
- (2). **Turnaround time of responses to queries;** All personnel licensing queries shall be responded to within three working days. If a response within three days is not possible, an acknowledgement should be sent explaining that a full reply will be sent within 10 working days. The ratio of acknowledgements to full replies is an indicator of the quality of service
- (3). **Errors and omissions;** Mistakes in the preparation of licences and certificates, such as wrong sPEL-Mling of names, incorrect address etc., must be rectified without charge to the licence or certificate holder.
- (4). **Repetitive queries from industry;** Repetitive queries indicate that some aspect of personnel licensing is unclear and causing confusion. Where such confusion is identified, remedial action shall be initiated to clarify the affected procedures.

### 11.3 Internal Audits

Audits of personnel licensing activities are to be carried out at least every six months. The auditors will be appointed by the Director of Airworthiness Certification. The objective of each audit will be to ensure that all activities are carried out in accordance with the procedures in this manual. Where evidence of non-conformance is identified a formal report shall be made to the Director of Airworthiness Certification.

Audits shall be carried out with the following principle in mind:

"Say it - in this manual  
Do it - in accordance with this manual  
Prove it - that it's been done as described".

In other words, this manual SAYS how personnel licensing staff will carry out their duties. The audit will seek PROOF that the procedures in this manual accurately describe how the work is done; how the actually staff DO IT.

Once procedures are written down and in place it is a natural human tendency to find alternative ways of doing things. If these alternatives are identified during an audit and are known to be satisfactory alternatives, the affected procedures in this manual are to be amended to describe how staff are actually carrying out that task.

## CHAPTER 12 – ADMINISTRATIVE TASKS

### 12.1 General

The administrative tasks an important role in the efficiency of a DGCA Personnel Licensing system.

The administrative tasks of a PEL-M office include:

- (1). Providing an efficient and secure record system which maintains up-to-date records of licensing and certification actions;
- (2). Maintaining the PEL-M office library;
- (3). Ensuring that all regulatory material and PEL-M documents held by staff are kept updated;
- (4). Drafting and promulgation of examination schedules in co-operation with the Chief Examiners;
- (5). Printing and collating examination papers, and distribute them in order to meet the published scheduled times;
- (6). Handling routine correspondence in respect to requests for study guidance material, dates of examinations, application forms, and examination fees;
- (7). Dealing with the public when necessary on matters related to:
  - a. Scheduled examinations;
  - b. Requests for explanatory pamphlets and any queries related to examination administration; and
  - c. All matters appropriate to license or rating or examination applications;
- (8). Handling routine correspondence in respect to applications for licenses or ratings, or any other routine clerical matters requiring action;
- (9). Processing all license applications and prepare the material for the Technical Licensing Officer;
- (10). Completing license forms and prepares licenses for official signature; and supervising the PEL-M computer system.
- (11). Records of personnel licensing activity.
- (12). Collection fees

### 12.2 Administrative Support Personnel or Technical Licensing Officer

Many of the tasks associated with Personnel Licensing are of an administrative nature. The qualifications required for administrative support personnel are similar to other administrative functions. Personnel should be familiar with office equipment and the procedures in use. The administrative support staffs play an important role in the efficiency and integrity of a State Personnel Licensing system. It is therefore essential to ensure that administrative staff has the personal integrity and the required knowledge to discharge their responsibilities.

Every each new staff member should be trained on the specific tools and procedures of the personnel licensing office and be familiarized with the concept and rules governing personnel licensing. It is recognized that it is

not always possible to provide formal training on the subject and that most of administrative staff receive their training on the job. It is nevertheless important to ensure that training is actually taking place and this could easily be achieved by a training checklist identifying all of the items on which training should take place and where each item is checked out by the supervisor and trainee when the training on this item is complete.

### **12.3 Records of Licence Holders Personal Files**

The record held by a DGCA licensing system included a written registry of license, complemented by individual files which contained a summary of all licensing action taken and all the personal records of the applicant, such as training and written test results or correspondence in chronological order.

The record system is fully or partially paper based and secure for confidential data. Such a purely manual system is adequate for DGCA with a limited number of licenses. However, as the number of active license grows beyond a few thousand, a computerized system becomes necessary either to complement or replace the paper-based records.

The records/data of certificate/license holders on the AME License Registry or DAAO Form 65.23, as follow:

- (1). Number of License
- (2). Name
- (3). Place/date of birth
- (4). Nationality
- (5). Permanent address
- (6). Date of issued License
- (7). Sample of signature license holder
- (8). Basic certificate held
- (9). Aircraft type or group rating held
- (10). Validity of license.

The documents of certificate/license holders shall be keep on DGCA PEL-M office, as follow:

- (1). DAAO Form 65.01 and DAAO 65.02.
- (2). Statement of Competence A1 or A2 or A3 or A4 or C1 or C2 or C4.
- (3). A copy of ID or Passport
- (4). A copy of basic certificate
- (5). A copy of type rating training certificate
- (6). A copy of human factor training
- (7). A copy of foreign AME license for recognitions License
- (8). A copy of verification letter for recognitions License
- (9). Photo ID

The certificate/license holder records will be kept for the lifetime of the holder or kept for at least 2 (two) years after the holder retired or not extends 2 period times or died.

#### **12.4 Fees of the Certificate or License Process**

The details of fees of the certificate or License process refer to Government Degree No. XXXXX.

The fees shall be pay before processing of the certificate/license and collecting by the accounting/financial personnel section of the DAAO office.

#### **12.5 Allocation of Licence and Certificate Numbers**

The Allocation of the license or certificate number refers to AME License Registry and control by Technical Licensing Officer.

#### **12.6 Licence Registers**

The list of the AME license holder refers to AME License Registry or IMSIS IT database system.

#### **12.7 Procedures of Administrative records**

The administrative record processes of the certificate/license are responsible by Technical Licensing Officer under supervised by Head of Personnel Section.

The administrative process as follow:

- (1) Recorded of examinations paper and result examinations.  
Detail of records of examination procedures refer to chapter 5.5 on this part.
- (2) Recorded of certificate/licensing data.  
The entry data/records on paragraph 12.3 to the aircraft maintenance engineer registry or IMSIS IT database refer to DAAO Form 65.02. These form should be completed enter recommendation issue or renewal of license by the examiner/inspector.

#### **12.8 List of Approved Training Courses**

The list of approved training organization course refers to AMTO 147 Registry.

#### **12.9 Library and Reference Documentation**

The library and reference material/document for licensing will be up date and control by library staff of DAAO office.

## 12.10 Facility and Equipment

The facilities and equipment of a PEL-M office should meet the following requirements:

- (1) *Easy access by the public:* The public area should include a sitting area where customers can fill in documents and forms, wait their turn or for their documents to be processed.
- (2) *Provision of a good working environment for the staff:* The PEL-M Office should also provide reasonably quiet surroundings for executing technical or other work demanding high concentration, such as preparing examination questions, etc. Ready access to documents should also be possible.
- (3) *Maintenance of confidential records in a secure way:* Most of the documents held in a PEL-M Office are of a confidential nature and appropriate measures should be taken to ensure the security of the documents and control access to them. This requires that the paper records be kept in cabinets that should be located in a secure area. The right of access to the various documents, in electronic or paper format, should be defined for each staff member. This is especially true for examination material unless it is legally required to be in the public domain, and its confidentiality must be preserved at all stages from development, through production and distribution, to delivery.