KEPUTUSAN DIREKTUR JENDERAL PERHUBUNGAN UDARA
NOMOR : SKEP/ 22 / I / 2002

Tentang

PETUNJUK PELAKSANAAN (STAFF INSTRUCTION (M) NOMOR 65-1)
TENTANG PROSEDUR PEMBERIAN SERTIFIKAT KECAKAPAN
PERSONIL AHLI PERAWATAN PESAWAT UDARA

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,
   maka perlu ditetapkan petunjuk pelaksanaan (Staff Instruction (M) Nomor
   65-1) tentang prosedur pemberian sertifikat kecakapan personil ahli
   perawatan pesawat udara;

Mengingat :

1. Undang-undang Nomor 15 Tahun 1992 tentang Penerbangan (Lembaran
   Negara Tahun 1992 Nomor 53, Tambahan Lembaran Negara Nomor 3-81)

2. Peraturan Pemerintah Nomor 3 Tahun 2001 tentang Keamanan dan
   Keselamatan Penerbangan (Lembaran Negara Tahun 2301 Nomor 1
   Tambahan Lembaran Negara Nomor 4075);

3. Keputusan Presiden Nomor 165 Tahun 2000 tentang Kedudukan, Tugas,
   Fungsi, Kewenangan, Susunan Organisasi dan Tata Kerja Departemen;
   sebagaimana telah diubah terakhir dengan Keputusan Presiden Nomor 37
   tahun 2001;

4. Keputusan Presiden Nomor 102 Tahun 2001 tentang Kedudukan, Tugas,
   Fungsi, Kewenangan, Susunan Organisasi dan Tata Kerja Departemen;

5. Keputusan Menteri Perhubungan Nomor 24 Tahun 2001 tentang
   Organisasi dan Tata Kerja Departemen Perhubungan;

/6. Keputusan. ....

**MEMUTUSKAN:**

Persetapan:

KEPUTUSAN DIREKTUR JENDERAL PERHUBUNGAN UDARA TENTANG PETUNJUK PELAKSANAAN (STAFF INSTRUCTION (M) NOMOR 65-1) TENTANG PROSEDUR PEMBERIAN SERTIFIKAT KECAKAPAN PERSONIL AHLI PERAWATAN PESAWAT UDARA.

Pertama:

Petunjuk Pelaksanaan (Staff Instruction (M) Nomor 65-1) mengenai Prosedur Pemberian Sertifikat Kecakapan Personil Ahli Perawatan Pesawat Udara sebagaimana tercantum dalam Lampiran Keputusan ini.

Kedua:

Kepala Direktorat Sertifikasi Keluakan Udara mengawasi pelaksanaan Keputusan ini.

Ketiga:

Keputusan ini mulai berlaku pada tanggal ditetapkan.

Ditetapkan di: JAKARTA
Pada tanggal: 30 Januari 2002

Direktur Jenderal Perhubungan Udara

[Signature]

Suraryo
NIP.: 120038217

Salam,

Keputusan ini disampaikan kepada:
1. Menteri Perhubungan dan Telekomunikasi;
2. Sekretaris Jenderal Departemen Perhubungan;
3. Sekretaris Direktorat Jenderal Perhubungan Udara;

MEMUTUSKAN:

Meretapkan : KEPUTUSAN DIREKTUR JENDERAL PERHUBUNGAN UDARA TENTANG PETUNJUK PELAKSANAAN (STAFF INSTRUCTION (M) NOMOR 65-1) TENTANG PROSEDUR PEMBERIAN SERTIFIKAT KECAKAPAN PERSONIL AHLI PERAWATAN PESAWAT UDARA.

PERTAMA : Petunjuk Pelaksanaan (Staff Instruction (M) Nomor 65-1) mengenai Prosedur Pemberian Sertifikat Kecakapan Personil Ahli Perawatan Pesawat Udara sebagaimana tercantum dalam Lampiran Keputusan ini.

KEDUA : Kepala Direktorat Sertifikasi Kelaikan Udara mengawasi pelaksanaan Keputusan ini.

KETIGA : Keputusan ini mulai berlaku pada tanggal ditetapkan.

Ditetapkan di : JAKARTA
Pada tanggal : 30 Januari 2002

Direktur Jenderal Perhubungan Udara

Ttd

Soenaryo Y
NIP.: 120036217

Salinan Keputusan ini disampaikan kepada:
1. Menteri Perhubungan dan Telekomunikasi;
2. Sekretaris Jenderal Departemen Perhubungan;
3. Sekretaris Direktorat Jenderal Perhubungan Udara;

Salinan sesuai dengan aslinya

Kepala Bagian Hukum
Setda Hubud

NIP. 120108009
Staff Instruction

SI (M) 65 - 1

Personnel Licensing Procedures

Revision : Original
Date : October 2001

REPUBLIC OF INDONESIA – DEPARTMENT OF COMMUNICATIONS
DIRECTORATE GENERAL OF AIR COMMUNICATIONS
JAKARTA – INDONESIA
FOREWARD

1. PURPOSE : This Staff Instruction has been prepared to guide and assist all Directorate of Airworthiness Certification personnel, Directorate General of Air Communications 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 : Revision of this Staff Instruction will be approved by the Director General of Air Communications.

DIRECTOR GENERAL OF AIR COMMUNICATIONS

[Signature]

SOENARYO L.Y.
NIP.: 120038217
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DIRECTOR GENERAL OF AIR COMMUNICATIONS

TTD

SOENARYO Y.
NIP.: 120038217

Salinan sesuai dengan aslinya
Kepala Bagian Hukum
Setdijen Hubud

F.A. SIDOYOY
NIP.120108009
S.I. 65 – 1 Personnel Licensing Procedures

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Appendix 1 Anniversary 1 To The Convention (Excluding Supplement)
1.1 Purpose

The purpose of this SI is to prescribe personnel licensing procedures. Compliance by DGAC 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 DGAC 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 Air Communications and controlled on his behalf by Directorate of Airworthiness Certification.

(Signature)
(Name)
CHAPTER 2 – DUTIES AND RESPONSIBILITIES

2.1 DGAC PEL Organisational Structure

Diagram:

- Director of Airworthiness Certification
- Sub-Directorate of Maintenance Control
- Maintenance Personnel Licensing Section
2.2 PEL Duties and Responsibilities of Senior Staff

(a) Director of Airworthiness Certification

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 licensing activities are co-ordinated with other units of the DGAC.

(8). Ensure that DGAC 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 for the issue and amendment of Air Operator's Certificates, Operations Specifications, Approved Persons Lists, Aerodrome Licences 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) Chief Examiner (Maintenance)

Responsible to:

Director of Airworthiness Certification

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). 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.

(5). 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.
(6). Establish and maintain a system for ensuring that oral and written examining techniques are effective and compatible with the current aviation environment.

(7). Establish and maintain an efficient clerical system for the preparation and grant of licences, approvals and certificates to successful candidates.

(8). Direct the staff of examiners in assessing the extent of examination to be undertaken by applicants for validation of foreign maintenance licences/approvals.

(9). 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.

(10). 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;

(11). 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.

(12). Direct the evaluation of applications for exemption from type examination from applicants who have completed an approved course of training.

(13). Direct the evaluation of training courses and testing methods of applicants for certificates of competency for welding and non-destructive testing.

(14). Develop, maintain, and direct standards appropriate for the approval of amateur-built aircraft stage inspectors.
(15). Develop and maintain effective liaison with other organisations conducting training and/or examination of aircraft maintenance engineers and tradesmen.

(16). 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) Technical Licensing Officer

Responsible to:

Director of Airworthiness Certification

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.
CHAPTER 3 – OVERVIEW OF PERSONNEL LICENSING

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 Air Communications.

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.

DGAC 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 DGAC 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

There are minimum age limits for various licence categories; 21 years for a Certificate of Maintenance Approved, 21 years for an aircraft maintenance engineer licence etc.

(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 15 Year 1992 is, in effect, Indonesia's "Civil Aviation Act" and, as such, is in compliance with the Convention. Article 18, reproduced here in full, provides for the competency of aviation personnel as follows:

**Article 18**

(1) All aviation personnel shall have a certificate of competency.

(2) The certificate of competency mentioned in section (1) shall be obtained through education and training.

(3) The requirements and procedures for obtaining a certificate of competency mentioned in section (1) and section (2) shall be further regulated by government.

In summary, Article 18 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, certificate, authorisation 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". A copy of Annex 1 is in Appendix 1 of this SI.

The further regulations prescribed by Article 18 are Civil Aviation Safety Regulations (CASR). The national regulations for personnel licensing in Indonesia are 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

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.

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Table 1 showing relationship of international and national legislation
CHAPTER 5 – EXAMINATION VENUES AND TIMETABLES

5.1 DGAC Examination Venues

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

5.2 DGAC Examination Invigilators

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

5.3 Other Examination Venues

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

5.4 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.

5.5 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
## DGAC Examination Venues

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Chapter 5 – Examination Venues and Timetables
### Other Examination Venues

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Chapter 5 – Examination Venues and Timetables
### Attachment 4

Scheduled Maintenance Engineer Examinations Timetable

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CHAPTER 6 - PROCESSING EXAMINATION APPLICATIONS

6.1 Receipt of Applications
Submitted or received applications are registered by signed and numbered receipt sheet/form.

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

6.3 Applications for On-demand Examinations
The name form and procedures are to be implemented as other examination application, except that the handling is done and evaluation for eligibility will be done later after the conduct of the examination.

Application can be forwarded for individual or a number of persons on the intended date and time of examination.

6.4 Applications for Scheduled Examinations
The name form and procedures are to be implemented as other exams, except that the date, time and location are as scheduled on the examination notification letter.

6.5 Advice to Applicants
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 to the applicants within 14 (fourteen) days after the date of receipt.

6.6 Result Notification
The result of the examination will be notified by letter per batch or group or examination number and divided in to 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.

6.7 Examination Records
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.
Scheduled examinations.

NOTICE
DSKJ........... JUDJ...........

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

TYPE OF EXAM : ........................................................................
DATE : ........................................................................
TIME : ........................................................................

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Chapter 6 – Processing Examination Applications
The examination result records.

## DIRECTORATE GENERAL OF AIR COMMUNICATIONS
### DIRECTORATE OF AIRWORTHINESS CERTIFICATION

**Jl. Medan Merdeka Barat No. 8 Gedung Karya Lt. 22 Jakarta 10110**

**Tel.:** (021) 3811308 **Fax:** (021) 3506663

### AIRCRAFT MAINTENANCE ENGINEER LICENCE EXAMINATIONS

**NAME OF TYPE RATING:**

**NO:** (Number of paper examination)

**DATE:**

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| 2 |

Jakarta, Examinations Leader

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Chapter 6 – Processing Examination Applications
The result of the examination.

**NOTICE**

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

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

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Chapter 6 – Processing Examination Applications
The answer sheet the list of examinee

DIREKTORAT JENDERAL PERHUBUNGAN UDARA

LEMBAR JAWABAN UNTUK SOAL-SOAL PILIHAN

NO. UIJIAN:  
MATERI UIJIAN:  
TGL:  
TEMPAT:  

INSTRUKSI-INSTRUKSI

1. Pakailah lembar jawaban ini hanya untuk jawaban soal "pilihan"
2. Bacalah pertanyaan-pertanyaan dengan teliti, pilihlah dan pastikan jawaban yang Saudara anggap betul sebelum anda mengisi pada lembar jawaban ini (untuk tep-tap soal hanya ala satu jawaban yang betul)
3. Dengan mengingat nomor soal yang sedang Saudara jawab, carilah baris pada lembaran ini yang nomornya sama, kemudian pada baris tersebut berilah tanda silang (X) dalam lubang yang diberi huruf seperti huruf dari jawaban soal ujian yang Saudara anggap betul
4. Tanda silang hanya satu jawaban yang betul untuk tep-tap soal, bila lebih dari satu jawaban, maka dinyatakan tidak dijawab.
5. Pembentukan jawaban hanya diperkenankan maksimal 5 (lima) soal jawaban.

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PENYELENGGARA
UJIAN

PENGAWAS

PEMERIKSA 1.

PEMERIKSA 2.

JUMLAH JAWABAN YANG BENAR

NOMOR PESERTA UJIAN

TANDA TANGAN PESERTA

REKOMENDASI

LULUS

TIDAK LULUS

Chapter 6 – Processing Examination Applications
CHAPTER 7 – PREPARATION OF EXAMINATION PAPERS

7.1 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.

7.2 Authorised Examiners

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

7.3 Refresher Training

Authorised Examiners will undergo periodic refresher training in accordance with the schedule in Attachment 2 of this chapter.

7.4 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. The reference library assigned to each authorised examiner is listed in Attachment 3 of this chapter.

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.
7.7 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.

7.8 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 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.

Chapter 7 – Preparation Of Examination Papers
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.

Chapter 7 – Preparation Of Examination Papers
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 tests vary widely, the form and contents of each test is left to the discretion of the assessing examiner.
## Authorised Examiners

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<th>NAME</th>
<th>AUTHORISED EXAMINATIONS</th>
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Signature of Authorising Officer
## Schedule of Refresher Training for Authorised Examiners

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Signature of Authorising Officer
## Reference Texts Assigned to Authorised Examiners

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Chapter 7 – Preparation Of Examination Papers
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 DGAC'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 8 – APPROVAL OF PEL TRAINING COURSES

8.1 Courses to be Approved

This chapter provides the procedures used by staff to approve PEL 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 DAC Form 147-02. A copy of this form is in Attachment 2 of this chapter.

8.2 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 DGAC. 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?

8.3 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, DGAC 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 DGAC 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 DGAC 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 PEL 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.

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

Parts 121 and 135 training is associated with:

• New or different aircraft/engines/systems

Chapter 8 – Approval of PEL Training Courses
• 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 DGAC.

Assessment Guidelines

• Under Parts 121 and 135, 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, DGAC 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 DGAC.

• 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 DGAC 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 and 135 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.
8.3 Continued Surveillance and Monitoring

Surveillance and monitoring of training organisations is to be carried out in accordance with the CheckList and Inspection Record DAC Form 147-01. A copy of this form is in Attachment 1 of this chapter.

8.5 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.
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 with the requirements of the Civil Aviation Safety Regulations relating to the establishment of an approved organization, and is empowered to operate as:

Aircraft Maintenance Repairing Organization

With the following ratings:

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)
APPLICATION FOR APPROVAL FOR OF AN AIRCRAFT MAINTENANCE TRAINING ORGANIZATION

INSTRUCTIONS: Type or print. Submit original to DGAC office. If additional space is required, use attachments

1. NAME OF ORGANIZATION

2. TELEPHONE NO:

3. ADDRESS

4. TRAINING DIRECTOR

5. LOCATION OF FACILITIES (Check as applicable)

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<th>ON AIRPORT</th>
<th>IN SUBURBS</th>
<th>IN CITY</th>
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6. ORGANIZATION STATUS

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<th>PUBLIC</th>
<th>PRIVATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NON-PROFIT</td>
<td>OTHER:</td>
</tr>
</tbody>
</table>

7. APPLICATION SUBMITTED FOR

<table>
<thead>
<tr>
<th>ORIGINAL CERTIFICATE</th>
<th>CHANGE IN RATING</th>
<th>CHANGE IN OWNERSHIP</th>
<th>CHANGE IN LOCATION, FACILITIES AND EQUIPMENT</th>
<th>ADDITIONAL RATING</th>
<th>ADDITION OF BASIC</th>
<th>OTHER (Specify):</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRFRAME</td>
<td>ENGINE</td>
<td>RADIO</td>
<td>INSTRUMENT</td>
<td>ELECTRICAL</td>
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<td></td>
</tr>
</tbody>
</table>

8. BASIC AND RATING APPLIED FOR AND MIN. TOTAL HOURS PER COURSE

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TOTAL HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIC</td>
<td>RATING</td>
</tr>
</tbody>
</table>

9. ATTACHMENTS

<table>
<thead>
<tr>
<th>A. TRAINING PROCEDURES MANUAL (If Organization is Approved)</th>
<th>E. PHOTOGRAPHS OF FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. PROPOSED CURRICULUM</td>
<td>F. LIST OF REQUIRED PRAC. PROJECTS</td>
</tr>
<tr>
<td>C. LIST OF FACILITIES AND EQUIPMENT TO BE USED</td>
<td>G. SCHEDULE OF REQUIRED TESTS</td>
</tr>
<tr>
<td>D. LIST OF INSTRUCTORS, NAMES, CERTIFICATES, TYPE, AND</td>
<td>H. COPY OF STUDENT RECORD SYSTEM</td>
</tr>
<tr>
<td>RATING HELD, AND SUBJECT TO BE TAUGHT</td>
<td>I. OTHER (Specify)</td>
</tr>
</tbody>
</table>

10. APPLICANT'S CERTIFICATION

NAME OF OWNER (Include name(s) of individual owner, all partners, or corporation name giving State and date of incorporation)

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.

DATE OF APPLICATION

AUTHORIZED SIGNATURE

11. CERTIFICATION ACTION (FOR DGAC USE ONLY)

<table>
<thead>
<tr>
<th>ACTION</th>
<th>CERTIFICATE NO</th>
<th>CATEGORY</th>
<th>TOTAL HOURS</th>
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<tbody>
<tr>
<td>APPROVED</td>
<td>DAC FORM 147-01</td>
<td>AIRFRAME</td>
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<tr>
<td>DISAPPROVED</td>
<td>DAC FORM 147-01</td>
<td>ENGINE</td>
<td></td>
</tr>
</tbody>
</table>

REMARKS

12. DATE CERTIFICATE ISSUED

13. NAME

14. ISSUING OFFICIAL'S SIGNATURE

DAC FORM 147-02 (07-01)
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."  

<table>
<thead>
<tr>
<th>NAME OF ORGANIZATION</th>
<th>CERTIFICATE NO.</th>
<th>TYPE OF INSPECTION AND DATE</th>
<th>SESSION</th>
<th>SURVEILLANCE</th>
<th>CERTIFICATION</th>
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</thead>
<tbody>
<tr>
<td>Category</td>
<td></td>
<td></td>
<td>基本</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization Approved</td>
<td></td>
<td></td>
<td>Training Approved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RATING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER:</td>
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<tr>
<td>ADDRESS AND LOCATION</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>OTHER LOCATION:</td>
<td></td>
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**A. GENERAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SATISFACTORY</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td>1. TRAINING PROCEDURE MANUAL (TPM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. A system for amendments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Organization and Personnel Chart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Attendance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Examinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Graduation Certificates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Instructor Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. The Equipment for Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. The Class Room Size/25 person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. QUALITY CONTROL (QC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. The policy and procedures described in TPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Individual Responsible for QC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. The System Effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. CURRICULUM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Curriculum approved by DGAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Number of hours per subject</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Course objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Indicating the level of competency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Skills to be Acquired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Ratio of Theory to Hand-on Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Amendments of Curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. RECORD KEEPING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. The policy and procedures described in TPM</td>
<td></td>
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</tr>
<tr>
<td>b. Organizations Maintain a Current record for each Student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ATTENDANCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Training Schedule</td>
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<td></td>
</tr>
<tr>
<td>b. Present Enrolment per Weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Grade for all courses including quizzes, test and practical projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. EXAMINATIONS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Validity of Examinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Course Objectives of Examinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. GRADUATION CERTIFICATES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. The Name and Location of The Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. The Type of Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. The Students Full Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. The Date of Course Completion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. An Embossed Raised Seal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. The Signature of Authorized Official</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. The DGAC Course Approval Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. List of Issued Certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. INSTRUCTOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Prerequisites of Instructor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Trained in Instructional Techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Specialist instructor experienced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. System for the Evaluation of Instructor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Recurrent training for Instructor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chapter 8 – Approval of PEL Training Courses
9. FACILITIES
   a. Proper air conditioning, lighting and ventilation
   b. Isolated from All Interruption
   c. Classroom and Shop space suitable for courses given and number of Students
   d. Instructional Aids
   e. Library
   f. Training uses facilities other than its own.

10. ADVISORY COMMITTEE
    a. Duties and Responsibilities described in TPM
    b. Policies and Procedures for Explaining changes to The Course in detail

---

B. BASIC TRAINING REQUIREMENT

1. Procedures of student prerequisites
2. Curriculum of Training Cover the Subjects and Item prescribed in the Applicable DGAC Curriculum guide
3. Reference material for Training
4. Training Aids Suitable for The Completion of practical projects as part of the curriculum
5. Procedures of an Aircraft with a valid C of A for Training Purposes
6. Policy and Procedures the Shop Facilities simulate an actual working environment
7. Equipment, Facilities and Procedures on:
   - Hangar
   - Sheet Metal Shop
   - Woodworking Shop
   - Engine Run-Up Area
   - Avionic and Instrument Shop
   - Electrical Shop

---

C. RATING TRAINING REQUIREMENT

1. Procedures of student prerequisites
2. Curriculum of Training Cover the Complete Aircraft Type, Engine, Propeller and so on.
3. Reference material for Training
4. Equipment, Facilities and Procedures on:
   - Simulator Area
   - Aircraft
   - Hangar or Shop
   - Training Aid Mock-Ups

---

REMARKS AND ITEMS TO FOLLOW UP ON NEXT INSPECTION

---

INSPECTION RESULTS

<table>
<thead>
<tr>
<th>SATISFACTORY</th>
<th>UNSATISFACTORY</th>
<th>OTHER</th>
</tr>
</thead>
</table>

INSPECTORS SIGNATURE AND STAMP

---

DAC FORM 147-03 (07-01)
CHAPTER 9 - GRANT OF PERSONNEL LICENCES AND RATINGS

9.1 General

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

9.1 Receipt of Applications

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

9.2 Fees

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

9.3 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) Certificate of Competency, approved by authorized person, e.g.:
        o From KU-071 for A1.
        o From KU-072 for A2.
        o From KU-073 for A3.
        o From KU-074 for A4.
        o From KU-075 for C1.
        o From KU-076 for C2.
        o From KU-078 for C4.

   (2) Last academic certificate and formal education certificate.

   (3) Basic Aircraft Technical Knowledge Training Certificate.

   (4) Personnal Experience Log Book.

(b) Issue Aircraft Maintenance Engineer Licence Procedure:

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

(1) Copy Basic Certificate.
(2) Copy Certificate Training
(3) DAC Form 65-01.
(4) Schedule Type Experience, Approved by authorized person.
(5) Personnal Experience Log Book.
(c) **Renewal AMEL procedure:**

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

1. Copy basic certificate.
2. Copy certificate training.
3. DAC Form 65-02

The Basic Certificate and AMEL will be approved by authorized person after all the requirements are completed.

The applicant will have the basic certificate and licence after accomplished the requirements.

### 9.4 Records

All issuance of basic certificate and licence will recorded in personnel file of each applicant.
CHAPTER 10 - GRANT OF OTHER AUTHORISATIONS

10.1 General Policy

It is DGAC policy to grant other authorisations granting specified privileges as follows:
(a) authorisations granting privileges that fall outside the scope of a licence - such as aircraft welding and NDT
(b) authorisations granting privileges that consist of only part of the privileges granted by a licence - such as an approval for a person to certify battery charging, wheel build-ups etc
(c) authorisations granting privileges for the certification of a new aircraft type where applicants have had insufficient experience for the grant of a licence rating.

The authorisations above are Maintenance Approvals and are granted to workshop engineers as provided for by CASR Part 65.

10.2 Maintenance Approvals for Aircraft Welding and NDT

The following are pre-requisite qualifications for welding and NDT Maintenance Approvals:
(a) Welding -
(b) NDT -

10.3 Maintenance Approvals for Limited Privileges

Maintenance Approvals granting limited certification privileges may be issued to persons who meet the following age, knowledge, skill and experience requirements:
(a) Age - not less than 21 years
(b) Knowledge - hold passes in Air Law and the appropriate technical examinations (see 11.5 below)
(c) Skill - has demonstrated to the satisfaction of the DGAC inspector that he or she has adequate skill for the task
(d) Experience - not less than six months experience exclusively on the task for which the Maintenance Approval is sought, of which at least three months must be during the period immediately preceding the date of application.

10.4 Maintenance Approvals for New Types

Maintenance Approvals may be issued to licensed aircraft maintenance engineers who have successfully completed approved training on a new type but have not gained sufficient experience for the grant of a licence rating. The grant of these Maintenance Approvals is not automatic and will be subject to the following additional conditions:
(a) Applicants must already be licensed on a type that is comparable to the new type.

(b) Applicants must be certifying line maintenance engineers with at least six months certifying experience on a comparable type within the 12 months immediately preceding the date of application.

10.5 Examinations

All applicants for Maintenance Approvals must pass the Air Law examination and the additional examinations as specified below.

(a) Welding

(b) NDT

(c) Limited privileges
CHAPTER 11 - RECOGNITION OF INDONESIAN MILITARY QUALIFICATIONS

11.1 General Policy

It is the general policy of DGAC 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.

12.2 Military Aircraft Engineers and Technicians
CHAPTER 12 – RECOGNITION OF OTHER QUALIFICATIONS

12.1 General Policy

It is the general policy of DGAC 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.

12.2 Licensed Aircraft Maintenance Engineers

12.3 Other Technical Qualifications

Technical qualifications gained in related fields, such as the automotive or electronics industries, may be recognised as follows.
CHAPTER 13 – QUALITY CONTROL

13.1 Responsibility for Quality

All staff are responsible for the quality of their work.

13.2 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 DGAC personnel licensing staff. Whenever any of the following occurs a record shall be kept for the purpose of measuring quality of service.

(a) 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.

(b) 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.

(c) Errors and omissions Mistakes in the preparation of licences and certificates, such as wrong spelling of names, incorrect address etc., must be rectified without charge to the licence or certificate holder.

(d) 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.

13.3 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 14 – ADMINISTRATIVE PROCEDURES

14.1 Licence Holders Personal Files

14.2 Other Files

14.3 Collection of Fees

14.4 Allocation of Licence and Certificate Numbers

14.5 Licence Registers

14.6 List of Approved Training Courses

14.7 Examination Arrangements

14.8 Distribution and Marking of Examination Papers
## Attachment 1

**File Register**

<table>
<thead>
<tr>
<th>FILE REFERENCE</th>
<th>FILE NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Engineer Licences -</td>
<td>General Inquires</td>
</tr>
<tr>
<td>Maintenance Approvals</td>
<td></td>
</tr>
<tr>
<td>Examination Inquires</td>
<td></td>
</tr>
<tr>
<td>Examination Rolls</td>
<td></td>
</tr>
<tr>
<td>Approved Training</td>
<td></td>
</tr>
<tr>
<td>Approved Training Organisations</td>
<td>- General</td>
</tr>
<tr>
<td>Approved Training Organisations</td>
<td>- Garuda</td>
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Chapter 14 - Administrative Procedures

Page 14 - 2
List of Licensing Registers

<table>
<thead>
<tr>
<th>REGISTER TITLE</th>
<th>REGISTER HOLDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Engineer Licence Register</td>
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</tr>
<tr>
<td>Maintenance Approval Register</td>
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</table>
## List of Approved Training Courses

<table>
<thead>
<tr>
<th>APPROVAL REF</th>
<th>COURSE TITLE</th>
<th>ORGANISATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boeing 747 Avionics</td>
<td>Garuda Aviation Training</td>
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