

CAR- 66

CAR 66 comprises 3 sections

1. Section 1 – General
2. Section 2 – Technical Requirements
3. Section 3 – Appendices

Graduating an approved training school is how a student can achieve a GCAA license within the shortest possible time, 2 years OJT.

The basic knowledge requirements and examinations corresponding to the current CAR 66 syllabus allows an application to GCAA for a license without limitations.

It is possible to gain a GCAA license without an approved CAR 147 course.

This method is called SELF STUDY and requires a further 5 years On Job Training in a CAR 145 approved organization,

IT must be noted that a GCAA licence is valid only in the UAE, but may be recognized by reciprocal arrangements with some other countries.

CAR 66 also outline the requirements that must be met for a student to gain a TYPE RATING.

Type training courses and type examinations must comply with the requirements of this regulation also.

Scope

This section defines the Aircraft Maintenance Engineers License and establishes the requirements for application, issue and continuation of its validity:

Aircraft maintenance engineers' licenses include the following 5 categories:

Category A: Line maintenance certifying mechanic

Category B1: Maintenance certifying technician - mechanical.

Category B2: Maintenance certifying technician – avionic

Category B3: Maintenance certifying technician – mechanical, Piston engine below 2000 kg Maximum Take Off Mass (MTOM)

Category C: Base maintenance certifying engineer.

Categories A and B1 are further subdivided into subcategories of aeroplanes, helicopters, turbine engines and piston engines as follows:

A1 and B1.1 Aeroplanes Turbine.

A2 and B1.2 Aeroplanes Piston.

A3 and B1.3 Helicopters Turbine.

A4 and B1.4 Helicopters Piston.

Maintenance 2 types line/base

Line:

Category -A minor problems EX (changing light)

Category -B1 large aircraft (5700kg)

Category -B2 large aircraft (5700kg)

Category – B3 light aircraft (200kg)

Base:

Category – C

Aircraft are grouped into the following categories:

Group 1: Complex Fly by wire aircraft exceeding FL 290.

Group 2a: Single engine turbo propeller aircraft

Group 2b: Single turbine engine helicopters

Group 2c: Single Piston engine helicopters

Group 3: Piston engine other than those in group 1

Application: An application for an Aircraft Maintenance Engineers License

1, finish CAR 147, the CAR 147 will give the applicant a COR(certificate of recognition)

2, logbook

3, 2 years OJT or 5 years OJT

Eligibility

1, An applicant for an aircraft maintenance license shall be at least 18 years of age.

2, UAE / GCC (Gulf Co-Operation Council) national.

3, A legal employee of UAE approved organization with proper justification for a need to hold a UAE GCAA maintenance Engineers license.

4, A graduate of a GCAA CAR 147 approved basic maintenance training organization.

Privileges

Category A

A Category A aircraft maintenance licence permits the holder to issue a CRS following:

1, Minor scheduled line maintenance.

2, Simple defect rectification.

category B1

A category B1 aircraft maintenance engineers licence shall permit the holder to issue certificates of release to service (CRS) and to act as B1 support staff following:

1, — Maintenance performed on aircraft:

Structure

Powerplant (Engines)

Mechanical systems

Electrical systems

2, Work on avionic systems requiring only simple tests to prove their serviceability and not requiring troubleshooting.

Category B1 includes the corresponding A subcategory.

category B2

A category B2 aircraft maintenance engineers license shall permit the holder:

1, to issue certificates of release to service (CRS) and to act as B2 support staff for following maintenance performed on:

1, Avionic and electrical systems.

2, Electrical and avionics tasks.

3, Powerplant and mechanical systems, requiring only simple tests to prove their serviceability

2, to issue certificates of release to service (CRS) following minor scheduled line maintenance and simple defect rectification.

The category B2 license does not include any A subcategory.

category B3

A category B3 aircraft maintenance engineers license shall permit the holder to issue certificates of release to service (CRS) and to act as B3 support staff for:

1, Maintenance performed on aircraft:

1, Structure

2, Powerplant (Engines

3, Mechanical systems

4, Electrical systems

2, Work on avionic systems requiring only simple tests to prove their serviceability and not requiring troubleshooting.

Category B3 does not include any A subcategory. It does not prevent the B3 licence holder from releasing maintenance tasks of an A1.2 provided the aircraft is less than 2000kg MTOM.

Category C

A Category C aircraft maintenance license shall permit the holder to issue a single CRS following base maintenance for the complete aircraft after the completion of all such maintenance.

The principal function of the Category C certifying staff is to ensure that all required maintenance has been called up and signed off by the Category B1 and B2 support staff before issue of the CRS.

Category C personnel who also hold Category B1 or B2 qualifications may perform both roles in base maintenance.

The holder of an aircraft maintenance engineers licence may not exercise its privileges unless:

- 1, in compliance with the applicable requirements of CAR M and CAR-145
- 2, did not work for 2 years
- 3, if the engineer is not able to do the job
- 4, don't know how to read and write in English

required 6 month experience in the preceding two years consists of two elements:

1, Duration How the 6 months is achieved

2, Nature The activities that are considered appropriate, including:

Servicing

 } Inspection

 } Operational and function testing

 } Troubleshooting

 } Modifying

 } Changing components

 } Supervising the above activities

 } Releasing the aircraft to Service

Experience should be supported by documentary evidence (LOGBOOK)

Holding a license is, in most circumstances, not sufficient to exercise the privilege of issuing a CRS:

Category B and C holders will need to hold the applicable Type Ratings

Category A holders require the applicable task authorizations.

Definitions

Electrical system: Electrical power supply, lighting, Continuity, insulation, and bonding,

Avionics system: Transfers, processes, displays, or stores data including coaxial and wireless transmission. It also includes Auto-flight, Communications, radar.

Simple test: The serviceability of the system can be verified by using aircraft controls, Switches, built in test equipment (BITE), Maintenance Computer (CMC) or external test equipment not involving special training.

Troubleshooting: Means the procedures and actions necessary to identify the root cause of a defect

Line maintenance: Is any maintenance that is carried out before flight to ensure that the aircraft is fit for the intended flight. It may include:

- 1, Trouble shooting.
- 2, Defect rectification.
- 3, Component replacement with use of external test equipment if required (may include components such as engines and propellers).
- 4, Scheduled maintenance
- 5, Minor repairs and modifications

Base maintenance: Means any task falling outside these criteria given above for line maintenance.

Certifying staff signing on behalf of a maintenance organisation must be issued with a certification authorization **by the person responsible for the Quality System:**

The Authorizations will take account of licence Type Ratings and Limitations as well as competence, capability and knowledge of company procedures and documentation.

The level of knowledge should be such that the license holder is able to:

- 1, Read and understand the instructions and technical manuals in use in the organization.
- 2, Make written technical entries and any maintenance documentation entries, which can be understood by those with whom they are normally required to communicate.
- 3, Read and understand the maintenance organisation procedures.
- 4, Communicate at such a level as to prevent any misunderstanding when exercising certification privileges.

Requirements (Basic Knowledge Requirements)

An applicant for aircraft maintenance licence shall demonstrate, by examination,

Knowledge level 1: A familiarization with the principal elements of the subject

Knowledge level 2: A general knowledge with ability to apply that knowledge.

Knowledge level 3: A detailed knowledge and ability to troubleshoot.

The training courses and examinations shall be passed within 10 years prior to the application.

applicant who is qualified by holding an academic degree in an aeronautical, mechanical from a recognized university the need for any examination will depend upon the course taken in relation to Appendix I to CAR 66.

Knowledge gained and examinations passed during previous experiences, for example, in military aviation and civilian apprenticeships, will be credited where the GCAA is satisfied that such knowledge and examinations are equivalent to that required by Appendix I to CAR 66.

On Job Training & Experience Requirements

For Category A, B1.2, B1.4, and B3:

3 years of practical maintenance experience (OJT) on operating aircraft, if the applicant has no previous relevant technical training;

2 years of practical maintenance experience (OJT) on operating aircraft and completion of training considered relevant by the GCAA as a skilled worker, in a technical trade.

1 year of practical maintenance experience (OJT) on operating aircraft and completion of a CAR 147 approved basic training course.

For Category B2, B1.1, and B1.3:

5 years of practical maintenance experience (OJT) on operating aircraft if the applicant has no previous relevant technical training.

3 years of practical maintenance experience (OJT) on operating aircraft and completion of training considered relevant by the Authority as a skilled worker, in a technical trade;

2 years of practical maintenance experience (OJT) on operating aircraft and completion of a CAR 147 approved basic training course.

For Category C with respect to large aircraft:

3 years of experience exercising certification or support staff duties as Category B1.1, B1.3, or B2 privileges on large aircraft.

5 years of experience exercising certification or support staff duties as Category B1.2 or B1.4 privileges on large aircraft.

Category C experience time only starts after the first type rating is obtained, per the definition of certifying or support staff

For Category C obtained through the academic route, recognized by the GCAA:

3 years of experience working in a civil aircraft maintenance environment on a representative selection of tasks directly associated with aircraft maintenance,

including six months of observation of base maintenance tasks.

Continued Validity of License

The aircraft maintenance engineering licence becomes invalid 8 years after its last issue,

The holder of a license shall complete the relevant fields in the ELicensing system and submit it to the GCAA, unless the holder works for an approved CAR 145 organization which can submit the information on behalf of the holder.

Evidence of qualification (if the GCAA asked for evidence in the inspection and the applicant did not have his license)

Personnel exercising certification privileges as well as support staff shall produce their license, as evidence of qualification, within 24 hours upon request from an authorized person.

Aircraft Type Training and Examination Standard

Aircraft Type training shall consist of:

1. theoretical training
2. examination
3. practical training
4. assessment.

the Category C does not require practical training and assessment.

The theory and practical elements shall have been started and completed within the 3 years preceding the application for a type rating endorsement.

Foreign Licenses

There are a total of 41 countries that GCAA recognize and whose standards are known and found to be acceptable and equivalent to GCAA. These are known as category 1 countries.

A further 21 countries are recognized as category 2 countries and may require additional requirements/examinations if deemed necessary by the GCAA.

A category 1 country applicant must complete a Module 10 examination in order to convert his or her license.

The category 2 applicant, such as a FAA license, must complete both Module 10 and Module 9 examinations

There are three levels of aircraft type training:

Level 1 General Familiarization

A brief overview of the airframe, systems and powerplant as outlined in the Systems Description Section of the Aircraft Maintenance Manual.

Level 2 Ramp and Transit

A basic system overview of controls, indicators, principle components including their location and purpose, servicing and minor troubleshooting. General knowledge of the theoretical and practical aspects of the subject.

Level 3 Line and Base Maintenance

Detailed description, operation, component location, removal/installation, BITE and troubleshooting procedures to maintenance manual level. Note: Level 3 training is required for type ratings.

A COR is issued by an approved CAR 147 organization and is evidence of having passed:

- Theoretical Basic examinations (CAR 66)
- Practical basic training (OJT) (CAR 147)
- On Job Experience (OJE) (CAR 145)