

PART 147

Maintenance Training Organizations

This part of Jordanian Civil Aviation Regulations is hereby adopted under the authority and provisions of the Civil Aviation Law No. (41) 2007



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Chief Commissioner/CEO
Civil Aviation Regulatory Commission



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**Subpart- A
General**

147.05 Scope.

(a) This Part establishes the requirements to be met by organizations seeking approval to conduct training and examination as specified in Part-66.

(b) Organizations involved in the training of personnel referred to in Part 66 shall be approved in accordance with Part 147 to be entitled:

(1) To conduct recognized basic training courses; and/or

(2) To conduct recognized type training courses; and/or

(3) To conduct examinations; and

(4) To issue training certificates.

(c) Any maintenance training organization approval issued by CARC in accordance with CARC previous requirements and procedures and valid at the time of entry into force of this Part shall be deemed to have been issued in accordance with this Part. For this purpose, by derogation from the provisions of 147.130(b) under Part 147, level 2 findings associated with the differences between CARC previous Part 147 and this Part shall be closed within one year.

(d) Ongoing basic training courses complying with the requirements applicable before this Part applies may be continued for a maximum period of thirty six months after the date by which this Part applies.

(e) Basic knowledge examinations, conducted by CARC, complying with the requirements applicable before this Part applies may be conducted until 31st, of December 2017

(f) Ongoing type training courses and type examinations complying with the requirements applicable before this Part applies shall be

continued and finished not later than twelve months after the date by which this Part applies.

(g) Competency- based approved training for aircraft maintenance personnel shall be conducted within an approved training organization”

147.10 General

A training organization shall be an organization or part of an organization registered as a legal entity.

147.15 Application

(a) An application for an approval or for the amendment of an existing approval shall be made on a form and in a manner established by CARC.

(b) An application for an approval or change to an approval shall include the following information:

- (1) The registered name and address of the applicant;
- (2) The address of the organization requiring the approval or change to the approval .
- (3) The intended scope of approval or change to the scope of approval;
- (4) The name and signature of the accountable manager;
- (5)The date of application.

Subpart- B
Organizational Requirements

147.100 Facility requirements.

(a) The size and structure of facilities shall ensure protection from the prevailing weather elements and proper operation of all planned training and examination on any particular day.

(b) Fully enclosed appropriate accommodation separate from other facilities shall be provided for the instruction of theory and the conduct of knowledge examinations:

(1) The maximum number of students undergoing knowledge training during any training course shall not exceed 25.

(2) The size of accommodation for examination purposes shall be such that no student can read the paperwork or computer screen of any other student from his/her position during examinations.

(c) The paragraph (b) accommodation environment shall be maintained such that students are able to concentrate on their studies or examination as appropriate, without undue distraction or discomfort.

(d) In the case of a basic training course, basic training workshops and/or maintenance facilities separate from training classrooms shall be provided for practical instruction appropriate to the planned training course. If, however, the organization is unable to provide such facilities, arrangements may be made with another organization to provide such workshops and/or maintenance facilities, in which case a written agreement shall be made with such organization specifying the conditions of access and use thereof. CARC shall require access to any such contracted organization and the written agreement shall specify this access.

- (e) In the case of an aircraft type/task training course access, shall be provided to appropriate facilities containing examples of aircraft type as specified in 147.115(d).
- (f) The maximum number of students undergoing practical training during any training course shall not exceed 15 per supervisor or assessor.
- (g) Office accommodation shall be provided for instructors, knowledge examiners and practical assessors of a standard to ensure that they can prepare for their duties without undue distraction or discomfort.
- (h) Secure storage facilities shall be provided for examination papers and training records. The storage environment shall be such that documents remain in good condition for the retention period as specified in 147.125. The storage facilities and office accommodation may be combined, subject to adequate security.
- (i) A library shall be provided containing all technical material appropriate to the scope and level of training undertaken.

147.105 Personnel Requirements .

- (a) The organization shall appoint an accountable manager who has corporate authority for ensuring that all training commitments can be financed and carried out to the standard required by this Part.
- (b) A person or group of persons, whose responsibilities include ensuring that the maintenance training organization is in compliance the requirements of this Part, shall be nominated. Such person(s) must be responsible to the accountable manager. The senior person or one person from the group of persons may also be the accountable manager subject to meeting the requirements for the accountable manager as defined in paragraph (a).
- (c) The maintenance training organization shall contract sufficient staff to plan/ perform knowledge and practical training, conduct

knowledge examinations and practical assessments in accordance with the approval.

(d) By derogation to paragraph (c), when another organization is used to provide practical training and assessments, such other organization's staff may be nominated to carry out practical training and assessments.

(e) Any person may carry out any combination of the roles of instructor, examiner and assessor, subject to compliance with paragraph (f).

(f) The experience and qualifications of instructors, knowledge examiners and practical assessors shall be established in accordance with criteria published or in accordance with a procedure and to a standard agreed by CARC.

(g) The knowledge examiners and practical assessors shall be specified in the organization exposition for the acceptance of such staff.

(h) Instructors and knowledge examiners shall undergo updating training at least every 24 months relevant to current technology, practical skills, human factors and the latest training techniques appropriate to the knowledge being trained or examined.

147.110 Records of instructors, examiners and assessors.

(a) The organization shall maintain a record of all instructors, knowledge examiners and practical assessors. These records shall reflect the experience and qualification, training history and any subsequent training undertaken.

(b) Terms of reference shall be drawn up for all instructors, knowledge examiners and practical assessors.

147.115 Instructional equipment

(a) Each classroom shall have appropriate presentation equipment of a standard that ensures students can easily read presentation text/drawings/diagrams and figures from any position in the classroom.

Presentation equipment shall include representative synthetic training devices to assist students in their understanding of the particular subject matter where such devices are considered beneficial for such purposes.

(b) The basic training workshops and/or maintenance facilities as specified in 147.100(d) must have all tools and equipment necessary to perform the approved scope of training.

(c) The basic training workshops and/or maintenance facilities as specified in 147.100(d) must have an appropriate selection of aircraft, engines, aircraft parts and avionic equipment.

(d) The aircraft type training organization as specified in 147.100(e) must have access to the appropriate aircraft type. Synthetic training devices may be used when such synthetic training devices ensure adequate training standards.

147.120 Maintenance training material

(a) Maintenance training course material shall be provided to the student and cover as applicable:

(1) The basic knowledge syllabus specified in Part-66 for the relevant aircraft maintenance license category or sub-category and,

(2) The type course content required by Part-66 for the relevant aircraft type and aircraft maintenance license category or subcategory.

(b) Students shall have access to examples of maintenance documentation and technical information of the library as specified in 147.100(i).

147.125 Records

The organization shall keep all student training, examination and assessment records for an unlimited period.

147.130 Training procedures and quality system

(a) The organization shall establish procedures acceptable to CARC to ensure proper training standards and compliance with all relevant requirements in this Part.

(b) The organization shall establish a quality system including:

(1) An independent audit function to monitor training standards, the integrity of knowledge examinations and practical assessments, compliance with and adequacy of the procedures, and

(2) A feedback system of audit findings to the person(s) and ultimately to the accountable manager referred to in 147.105(a) to ensure, as necessary, corrective action.

147.135 Examinations

(a) The examination staff shall ensure the security of all questions.

(b) Any student found during a knowledge examination to be cheating or in possession of material pertaining to the examination subject other than the examination papers and associated authorized documentation shall be disqualified from taking the examination and may not take any examination for at least 12 months after the date of the incident. In case of conducting examination on an approved maintenance training organization, CARC shall be informed of any such incident together with the details of any enquiry within one calendar month.

(c) Any examiner found during a knowledge examination to be providing question answers to any student being examined shall be disqualified from acting as an examiner and the examination declared void. In case of conducting examination on an approved maintenance training organization, CARC must be informed of any such occurrence within one calendar month.

147.140 Maintenance training organization exposition.

(a) The organization shall provide an exposition for use by the organization describing the organization and its procedures and containing the following information:

(1) A statement signed by the accountable manager confirming that the maintenance training organization exposition and any associated manuals define the maintenance training organization's compliance with this Part and shall be complied with at all times.

(2) The title(s) and name(s) of the person(s) nominated in accordance with 147.105(b).

(3) The duties and responsibilities of the person(s) specified in subparagraph 2, including matters on which they may deal directly with CARC on behalf of the maintenance training organization.

(4) A maintenance training organization chart showing associated chains of responsibility of the person(s) specified in paragraph (a)(2).

(5) A list of the training instructors, knowledge examiners and practical assessors.

(6) A general description of the training and examination facilities located at each address specified in the maintenance training organization's approval certificate, and if appropriate any other location, as required by 147.145(b).

(7) A list of the maintenance training courses which form the extent of the approval.

(8) The maintenance training organization's exposition amendment procedure.

(9) The maintenance training organization's procedures, as required by 147.130(a).

(10) The maintenance training organization's control procedure, as required by 147.145(c), when authorized to conduct training, examination and assessments in locations different from those specified in 147.145(b).

(11) A list of the locations pursuant to 147.145(b).

(12) A list of organizations, if appropriate, as specified in 147.145(d).

(b) The maintenance training organization's exposition and any subsequent amendments shall be approved by CARC.

(c) Notwithstanding paragraph (b) minor amendments to the exposition may be approved through an exposition procedure (hereinafter called indirect approval).

147.145 Privileges of the maintenance training organization.

(a) The maintenance training organization may carry out the following as permitted by and in accordance with the maintenance training organization exposition:

(1) Basic training courses to the Part-66 syllabus, or part thereof.

(2) Aircraft type/task training courses in accordance with Part-66.

(3) The examinations on behalf of the CARC in case of aircraft type training courses

(4) The issue of certificates in accordance with Appendix III following successful completion of the approved basic or aircraft type training courses and examinations specified in subparagraphs (a)(1), (a)(2) and (a)(3), as applicable.

(b) Training, knowledge examinations and practical assessments may only be carried out at the locations identified in the approval certificate

and/or at any location specified in the maintenance training organization exposition.

(c) By derogation to paragraph (b), the maintenance training organization may only conduct training, knowledge examinations and practical assessments in locations different from the paragraph (b) locations in accordance with a control procedure specified in the maintenance training organization exposition. Such locations need not be listed in the maintenance training organization exposition.

(1) The maintenance training organization may subcontract the conduct of basic theoretical training, type training and related examinations to a non maintenance training organization only when under the control of the maintenance training organization quality system.

(2) The subcontracting of basic theoretical training and examination is limited to Part-66, Appendix I, Modules 1, 2, 3, 4, 5, 6, 8, 9 and 10.

(3) The subcontracting of type training and examination is limited to powerplant and avionics systems.

(d) An organization may not be approved to conduct examinations unless approved to conduct the corresponding training.

(e) By derogation from point (e), an organization approved to provide basic knowledge training or type training may also be approved to provide type examination in the cases where type training is not required.

147.150 Changes to the maintenance training organization.

(a) The maintenance training organization shall notify CARC of any proposed changes to the organization that affect the approval before any such change takes place, in order to enable CARC to determine continued compliance with this Part and to amend if necessary the maintenance training organization approval certificate.

(c) CARC may prescribe the conditions under which the maintenance training organization may operate during such changes unless CARC determines that the maintenance training organization approval must be suspended.

(d) Failure to inform CARC of such changes may result in suspension or revocation of the maintenance training organization approval certificate backdated to the actual date of the changes.

147.155 Continued validity.

(a) An approval shall be issued for a two years period.

It shall remain valid subject to:

(1) The organization remaining in compliance with this Part, in accordance with the provisions related to the handling of findings; and

(2) CARC being granted access to the organization to determine continued compliance with this Part; and

(3) The certificate not being surrendered or revoked.

(b) Upon surrender or revocation, the approval shall be returned to CARC.

147.160 Findings

(a) A level 1 finding is one or more of the following:

(1) Any significant non-compliance with the examination process which would invalidate the examination(s).

(2) Failure to give the CARC access to the organization's facilities during normal operating hours after two written requests.

(3) The lack of an accountable manager.

(4) A significant non-compliance with the training process.

(b) A level 2 finding is any non-compliance with the training process other than level 1 findings.

(c) After receipt of notification of findings, the holder of the maintenance

training organization approval shall define a corrective action plan and demonstrate corrective action to the satisfaction of CARC within a period agreed with.

Subpart- C

Approved Basic Training Course

147.200 The approved basic training course

(a) The approved basic training course shall consist of knowledge training, knowledge examination, practical training and a practical assessment.

(b) The knowledge training element shall cover the subject matter for a category or subcategory aircraft maintenance license as specified in Part-66.

(c) The knowledge examination element shall cover a representative cross section of subject matter from the paragraph (b) training element.

(d) The practical training element shall cover the practical use of common tooling/equipment, the disassembly/assembly of a representative selection of aircraft parts and the participation in representative maintenance activities being carried out relevant to the particular Part-66 complete module.

(e) The practical assessment element shall cover the practical training and determine whether the student is competent at using tools and equipment and working in accordance with maintenance manuals.

(f) The duration of basic training courses shall be in accordance with Appendix I.

(g) The duration of conversion courses between (sub) categories shall be determined through an assessment of the basic training syllabus and the related practical training needs.

147.205 Basic knowledge examinations

Basic knowledge examinations shall:

- (a) Be in accordance with the standard defined in Part-66.
- (b) Be conducted without the use of training notes.
- (c) Cover a representative cross section of subjects from the particular module of training completed in accordance with Part-66.

147.210 Basic practical assessment

- (a) Basic practical assessments shall be carried out during the basic maintenance training course by the nominated practical assessors at the completion of each visit period to the practical workshops/maintenance facility.
- (b) The student shall achieve an assessed pass with respect to 147.200(e).

**Subpart- D
Aircraft Type/Task Training**

147.300 Aircraft type/task training

A maintenance training organization shall be approved to carry out Part-66 aircraft type and/or task training subject to compliance with the standard specified in Part 66.45.

147.305 Aircraft type examinations and task assessments

A maintenance training organization approved in accordance with 147.300 to conduct aircraft type training shall conduct the aircraft type examinations or aircraft task assessments specified in Part-66 subject to compliance with the aircraft type and/or task standard specified in Part-66.45.

Appendix I**Basic Training Course Duration**

The Minimum duration of a complete basic course shall be as follows:

| Basic Course | Duration (in hours) | Theoretical training ratio (in %) |
|--------------|---------------------|-----------------------------------|
| A1 | 800 | 30 to 35 |
| A2 | 650 | 30 to 35 |
| A3 | 800 | 30 to 35 |
| A4 | 800 | 30 to 35 |
| B1.1 | 2 400 | 50 to 60 |
| B1.2 | 2 000 | 50 to 60 |
| B1.3 | 2 400 | 50 to 60 |
| B1.4 | 2 400 | 50 to 60 |
| B2 | 2 400 | 50 to 60 |
| B3 | 1 000 | 50 to 60 |

Appendix II

Maintenance Training Organization Approval referred to in Part-147

CIVIL AVIATION REGULATORY COMMISSION OF JORDAN

MAINTENANCE TRAINING AND EXAMINATION ORGANIZATION APPROVAL CERTIFICATE

Approval Number: CARC.MTO. XXXX

Pursuant to the Civil Aviation Law No. (41) of 2007, and the Jordanian Civil Aviation Regulations (JCAR) Part 147 for the time being in force and subject to the conditions specified below, the Civil Aviation Regulatory Commission (CARC) hereby certifies:

[COMPANY NAME AND ADDRESS]

as a maintenance training organization in compliance with Part-147 approved to provide training and conduct examinations listed in the attached approval schedule and issue related certificates of recognition to students using the above references.

CONDITIONS:

1. This approval is limited to that specified in the scope of work section of the approved maintenance training organization exposition as referred to in Part-147; and
2. This approval requires compliance with the procedures specified in the approved maintenance training organization exposition; and
3. This approval is valid whilst the approved maintenance training organization remains in compliance with Part-147.
4. Subject to compliance with the foregoing conditions, this approval shall remain valid for two years duration unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue:

Date of this revision:

Chief Commissioner

Signature

MAINTENANCE TRAINING AND EXAMINATION ORGANIZATION APPROVAL SCHEDULE

Civil Aviation Regulatory Commission of Jordan

Organization: [COMPANY NAME AND ADDRESS]

| CLASS | LICENCE | LIMITATION | |
|-------------|---------|------------|--|
| BASIC (") | B1 | TB1.1 | AEROPLANES TURBINE |
| | | TB1.2 | AEROPLANES PISTON |
| | | TB1.3 | (HELICOPTERS TURBINE |
| | | TB1.4 | HELICOPTERS PISTON |
| | B2 | TB2 | AVIONICS |
| | B3 | TB3 | PISTON-ENGINE NON-PRESSURIZED AEROPLANES 2 000 KG MTOM AND BELOW |
| | A | TA.1 | AEROPLANES TURBINE |
| | | TA.2 | AEROPLANES PISTON |
| | | TA.3 | HELICOPTERS TURBINE |
| | | TA.4 | HELICOPTERS PISTON |
| TYPE / TASK | C | T4 | [QUOTE AIRCRAFT TYPE] |
| | B1 | T1 | [QUOTE AIRCRAFT TYPE] |
| | B2 | T2 | [QUOTE AIRCRAFT TYPE] |
| | A | T3 | [QUOTE AIRCRAFT TYPE] |

This approval schedule is limited to those trainings and examinations specified in the scope of work section of the approved maintenance training organization exposition,

Maintenance Training Organization Exposition reference:

Date of original issue:

Date of last revision approved: Revision No:

Signed:

CERTIFICATE OF RECOGNITION

CIVIL AVIATION REGULATORY COMMISSION OF JORDAN

This certificate of recognition is issued to:

[NAME]

[DATE and PLACE OF BIRTH]

By

[COMPANY NAME AND ADDRESS]

Approval Number: CARC.MTO. XXXX

a maintenance training organization approved to provide training and conduct examinations within its approval schedule and in accordance with Part-147.

This certificate confirms that the above named person either successfully passed the approved basic training course or the basic examination stated below for the time being in force.

[BASIC TRAINING COURSE] or/and [BASIC EXAMINATION]1

[LIST OF PART-66 MODULES/DATE OF EXAMINATION PASSED]

Date:

Signed:

For: [COMPANY NAME]

CIVIL AVIATION REGULATORY COMMISSION OF JORDAN

CERTIFICATE OF RECOGNITION

This certificate of recognition is issued to:

[NAME]

[DATE and PLACE OF BIRTH]

By

[COMPANY NAME AND ADDRESS]

Approval Number: CARC.MTO.XXXX

a maintenance training organization approved to provide training and conduct examinations within its approval schedule and in accordance with Part-147.

This certificate confirms that the above named person either successfully passed the theoretical and/or practical elements of the approved type training course stated below and the related examinations for the time being in force.

[AIRCRAFT TYPE TRAINING COURSE]

[START and END DATES]

[SPECIFY THEORETICAL ELEMENTS OR PRACTICAL ELEMENTS]

and/or

[AIRCRAFT TYPE EXAMINATION]

[END DATE]

Date:

Signed:

For: [COMPANY NAME]

Appendix III

Certificates of Recognition referred to in Part-147

1. Basic Training/Examination

The Part-147 basic training certificate template detailed below is to be used for recognition of completion of either the basic training, the basic examination or both the basic training and basic training examinations.

The training certificate shall clearly identify each individual module examination by date passed together with the corresponding version of Appendix I to Part-66.

CERTIFICATE OF RECOGNITION

CIVIL AVIATION REGULATORY COMMISSION OF JORDAN

This certificate of recognition is issued to:

[NAME]

[DATE and PLACE OF BIRTH]

By

[COMPANY NAME AND ADDRESS]

Approval Number: CARC.MTO. XXXX

a maintenance training organization approved to provide training and conduct examinations within its approval schedule and in accordance with Part-147.

This certificate confirms that the above named person either successfully passed the approved basic training course or the basic examination stated below for the time being in force.

[BASIC TRAINING COURSE] or/and [BASIC EXAMINATION]1

[LIST OF PART-66 MODULES/DATE OF EXAMINATION PASSED]

Date:

Signed:

For: [COMPANY NAME]

2. Type Training/Examination

Part-147 type training certificate template detailed below is to be used for recognition of completion of either the theoretical elements, the practical elements or both the theoretical and practical elements of the type rating training course.

The certificate shall indicate the airframe/engine combination for which the training was imparted.

Type training certificate

Part-147 training certificate as detailed below may be used for recognition of completion of either the theoretical element or both the theoretical and practical elements. the practical elements or both the theoretical and practical elements of the type rating training course.

The certificate shall indicate the airframe/engine combination for which the training was imparted.

The appropriate references should be deleted as applicable and the course type box should detail whether only the theoretical elements were covered or whether theoretical and practical elements were covered.

The training certificate shall clearly identify if the course is a complete course or a partial course (such as an airframe or powerplant or avionic/electrical course) or a difference course based upon the applicant previous experience, for instance A340 (CFM) course for A320 technicians. If the course is not a complete one, the certificate shall identify whether the interface areas have been covered or not.

CIVIL AVIATION REGULATORY COMMISSION OF JORDAN

CERTIFICATE OF RECOGNITION

This certificate of recognition is issued to:

[NAME]

[DATE and PLACE OF BIRTH]

By

[COMPANY NAME AND ADDRESS]

Approval Number: CARC.MTO.XXXX

a maintenance training organization approved to provide training and conduct examinations within its approval schedule and in accordance with Part-147.

This certificate confirms that the above named person either successfully passed the theoretical and/or practical elements of the approved type training course stated below and the related examinations for the time being in force.

[AIRCRAFT TYPE TRAINING COURSE]

[START and END DATES]

[SPECIFY THEORETICAL ELEMENTS OR PRACTICAL ELEMENTS]

and/or

[AIRCRAFT TYPE EXAMINATION]

[END DATE]

Date:

Signed:

For: [COMPANY NAME]