

PART 65

CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS

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



Capt. Mohammad Amin Al-Quran
Chief Commissioner/CEO
Civil Aviation Regulatory Commission



Revision Control Sheet

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SUBPART-A
General

65.1 Applicability.

This part prescribes the requirements for issuing the following certificates and associated ratings and the general operating rules for the holders of those certificates and ratings:

- (a) Air-traffic controllers.
- (b) Aircraft dispatchers.
- (c) Mechanics.
- (d) Repairmen.
- (e) Parachute riggers.
- (f) Airport operations and maintenance personnel.
- (g) Air Navigation maintenance personnel.

65.2 Effectivity.

- (a) The Subparts D, E, I and the Appendixes A, B, C, D, E, of this regulation remain valid until 28 September 2015.
- (b) Ongoing basic training courses complying with the requirements applicable before Part 147 applies may be continued for a maximum period of thirty six months after the date by which Parts 147 and 66 apply.
- (c) Any maintenance license and if any, the technical limitations associated with that license, issued by CARC in accordance with Part 65 requirements and procedures and valid at the time of entry into force of Part 66, shall be deemed to have been issued in accordance with Part 66.

Certifying staff holding a license which do not require an individual type rating may continue to exercise his/her privileges until the first renewal or change, where the license shall be converted to the ratings defined in JCAR 66.45

65.3-65.9 Reserved.

65.11 Application and issue.

(a) Application for a certificate and appropriate class rating, or for an additional rating, under this part must be made on a form and in a manner prescribed by the CARC.

(b) An applicant who meets the requirements of this part is entitled to an appropriate certificate and rating.

(c) Unless authorized by the Chief Commissioner/CEO , a certificate holder under this part whose certificate is suspended may not apply for any rating to be added to that certificate during the period of suspension.

(d) Unless the order of revocation provides otherwise, a certificate holder under this part whose certificate is revoked may not apply for the same kind of certificate for one year after the date of revocation.

65.12 Offenses involving alcohol or drugs.

(a) A conviction for the violation of any national statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances is grounds for:

- (1) Denial of an application for any certificate or rating issued under this part for a period of up to one year after the date of final conviction; or
- (2) Suspension or revocation of any certificate or rating issued under this part.

(b) The commission of an act prohibited by 91.19(a) of JCAR is grounds for:

- (1) Denial of an application for a certificate or rating issued under this part for a period of up to one year after the date of that act; or
- (2) Suspension or revocation of any certificate or rating issued under this part.

65.13 Temporary certificate.

A certificate and ratings effective for a period of not more than 120 days may be issued to a qualified applicant, pending review of his application and supplementary documents and the issue of the certificate and ratings for which he applied.

65.14 Security disqualification.

(a) Eligibility standard.

No person is eligible to hold a certificate, rating, or authorization issued under this part when the Jordan Intelligence Department (JID), or the Public Security Department (PSD) has notified the CARC in writing that the person poses a security threat.

(b) Effect of the issuance by the JID/PSD of an Initial Notification of Threat Assessment:

- (1) The CARC will hold in abeyance pending the outcome of the JID/PSD final threat assessment review an application for any certificate, rating, or authorization under this part by any person who has been issued an Initial Notification of Threat Assessment by the JID/PSD.

(2) The CARC will suspend any certificate, rating, or authorization issued under this part after the JID/PSD issues to the holder an Initial Notification of Threat Assessment.

(c) Effect of the issuance by the JID/PSD of a Final Notification of Threat Assessment:

(1) The CARC will deny an application for any certificate, rating, or authorization under this part to any person who has been issued a Final Notification of Threat Assessment.

(2) The CARC will revoke any certificate, rating, or authorization issued under this part after the JID/PSD has issued to the holder a Final Notification of Threat Assessment.

65.15 Duration of certificates.

(a) A certificate or rating issued under this part shall be valid for 36 calendar months from the month in which it is issued.

(b) The holder of a certificate issued under this part that is suspended, revoked, or no longer effective shall return it to the Chief Commissioner/CEO.

65.16 Change of name: Replacement of lost or destroyed certificate.

(a) An application for a change of name on a certificate issued under this part must be accompanied by the applicant's current certificate and the court order, or other document verifying the change.

(b) An application for a replacement of a lost or destroyed certificate is made by a letter to the CARC. The letter must contain the name in which the certificate was issued, the permanent mailing address, and date and place of birth of the certificate holder, and any available information regarding the grade, number, and date of issue of the certificate, and the ratings on it; and

(c) An application for a replacement of a lost or destroyed medical certificate is made by letter to the CARC.

(d) A person whose certificate issued under this part or medical certificate, or both, has been lost may obtain a letter from the CARC confirming that it was issued. The letter may be carried as a certificate for a period not to exceed 60 days pending his receiving a duplicate certificate under paragraph (b) or (c) of this section, unless he has been notified that the certificate has been suspended or revoked.

65.17 Tests: General procedure.

- (a) Tests prescribed under this part are given at times and places, and by persons, designated by the Chief Commissioner/CEO.
- (b) The minimum passing grade for each test is 70 percent.
- (c) Mechanic: The minimum passing grade for basic examination (multiple choice is 70 percent and 60 percent for the essay questions).

65.18 Written tests: Cheating or other unauthorized conduct.

- (a) Except as authorized by the Chief Commissioner/CEO, no person may:
 - (1) Copy, or intentionally remove, a written test under this part;
 - (2) Give to another, or receive from another, any part or copy of that test;
 - (3) Give help on that test to, or receive help on that test from, any person during the period that test is being given;
 - (4) Take any part of that test in behalf of another person;
 - (5) Use any material or aid during the period that test is being given; or
 - (6) Intentionally cause, assist, or participate in any act prohibited by this paragraph.
- (b) No person who commits an act prohibited by paragraph (a) of this section is eligible for any airman or ground instructor certificate or rating under JCAR for a period of one year after the date of that act. In addition, the commission of that act is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

65.19 Re-testing after failure.

An applicant for a written, oral, basic examination or practical test for a certificate and rating, or for an additional rating under this part, may apply for retesting:

- (a) After 30 days from the date the applicant failed the test; or
- (b) The applicant” except mechanic” shall present a signed statement from an approved agency certifying that the applicant has been given additional instruction in each of the subjects failed and that the airman considers the applicant ready for retesting.

(c) An applicant for the air traffic controller certificate who fails the second practical test may apply for retesting upon presenting statement from a certificated and appropriately rated air traffic controller examiner or an air traffic controller instructor certifying that he/she has given the applicant at least 10 hours of additional instruction in each of the failed subjects.

(d) An applicant for the air traffic controller certificate who fails a third practical test for a certificate and rating or an additional rating. Under this subpart may apply after 30 days from the date he/she failed the test and after a recommendation by the On Job Training officer, Chief Unit and ANS Inspector.

(e) If the applicant for a mechanic certificate failed to pass any single examination paper after the fourth attempt, the applicant will not be eligible for re-entry to examination unless the applicant undertakes further training prescribed in paragraph (f) of this section.

(f) If the applicant for a mechanic certificate failed the fourth attempt, the applicant will not be eligible for the rating for which he/she applied unless he/she passes a new course in this rating as per JCAR Part 147 maintenance school approved accreditation system.

(g) The applicant for a mechanic certificate who fails the essay examinations part, will not proceed with practical tests unless the applicant pass the required examinations prescribed in paragraph 65.79 subpart-D of this part.

(h) If the applicant for an Air Traffic controller certificate failed the fourth attempt, the applicant will not be eligible for the rating for which he/she applied for.

**65.20 Applications, certificates, logbooks, reports, and records:
Falsification, reproduction, or alteration.**

(a) No person may make or cause to be made:

(1) Any fraudulent or intentionally false statement on any application for a certificate or rating under this part;

(2) Any fraudulent or intentionally false entry in any logbook, record, or report that is required to be kept, made, or used, to show compliance with any requirement for any certificate or rating under this part;

(3) Any reproduction, for fraudulent purpose, of any certificate or rating under this part; or

(4) Any alteration of any certificate or rating under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

65.21 Change of address.

Within 30 days after any change in his permanent mailing address, the holder of a certificate issued under this part shall notify the CARC.

65.23 Refusal to submit to a drug or alcohol test.

(a) General. This section applies to an employee who performs a function listed in part OPS 1 of JCAR.

(b) Refusal by the holder of a certificate issued under this part to take a drug test or an alcohol test required under the provisions of the JCAR is grounds for:

(1) Denial of an application for any certificate or rating issued under this part for a period of up to one year after the date of such refusal; and

(2) Suspension or revocation of any certificate or rating issued under this part.

SUBPART - B Air Traffic Controllers

65.31 Purpose.

The purpose of this subpart is detail to standards for the regulation of air traffic controller licensing.

65.31a Scope.

The scope of this subpart concentrates on regulatory and administrative procedures for issue, maintenance and where necessary the revocation of air traffic controller licensing.

65.31b Definitions.

Aerodrome Traffic Circuit: The specified path to be flown by aircraft operating in the vicinity of an aerodrome.

Authorized Representative: Air traffic control service for controlled flights in control areas.

Competence: The appropriate knowledge, skills and experience to provide the valid air traffic control services stated in an air traffic controller's license.

Competence Scheme: The approved method by which competence is measured and maintained by the Licensing Authority.

Endorsement: An entry in an ATC license indicating the air traffic control unit and the operational positions or sectors at which a controller may exercise the privileges of the valid rating or ratings included in the ATC license.

Endorsements fall into three categories as follows:

- License endorsement,
- Rating endorsement,
- Unit endorsement.

Note: Licensing Authority may expand the license Endorsement procedure to include other functions, procedures or work Practices such as Supervisor and/ or Examiner.

Extension Validation: The process by which a valid rating is endorsed for additional operational positions or sectors at the same Unit.

Licensing Authority: The Authority designated by the CARC as responsible for the licensing of personnel.

Note: In the provisions of the ICAO Annex 1 The Licensing Authority is deemed to have been given the following responsibilities:

Assessment of an applicant's qualifications to hold a licence or rating .

Issue and endorsement of licences and rating .

Designation and authorization of approved persons.

Approval of training courses.

Approval of the use of synthetic trainers.

Validation of licences issued by other Contracting States

It does not have the power to revoke a licence.

Licence Endorsement: An authorization entered on a air traffic controller licence and forming part Thereof, stating a specialist qualification associated with the valid ratings in the licence.

Medical Assessment: The evidence issued by the designated medical examiner that the licence holder meets specific requirements of medical fitness. It is issued following an evaluation by the Licensing Authority of the report submitted by the designated medical examiner who conducted the medical examination of the applicant for the licence.

On-the-Job Training (OJT): The integration in practice of previously acquired job-related routines and skills under the supervision of a qualified On-the-Job-Training instructor in a live traffic situation.

On-the-Job-Training Instructor (OJTI): A rated air traffic controller with an air traffic control license endorsed with a current qualification that permits the holder to carry out instruction in the operational environment for which the rating is issued.

Rated Air Traffic Controller: An air traffic controller holding a license and valid rating appropriate to the privileges to be exercised.

Rating: An authorization entered on or associated with a license and forming part thereof, stating special conditions, privileges or limitations pertaining to such license.

Rating Endorsement: An authorization entered on or associated with a rating and forming part thereof, stating special conditions, privileges or limitations pertaining to such rating.

Student Air Traffic Controllers: Selected individuals who have successfully completed approved Initial ATC Training to enable them to obtain qualifications prior to commencement of Unit Training.

Student Air Traffic Controller License: A license issued to a student air traffic controller after successful completion of Initial ATC Training. This license permits the holder to commence OJT in the 'live' air traffic control environment under the supervision of a suitably qualified air traffic controller.

Note: The student phase ends with the issue of an air traffic controller license and its associated rating.

Normally, the grant of a student or air traffic controller license will authorize individuals to transmit on aeronautical wave bands.

Trainee Air Traffic Controller: An air traffic controller who is training to obtain additional ratings or endorsements.

Unit Endorsement: An authorization associated with a rating and where appropriate rating endorsement(s), stating the sectors and/or operational positions for which the rating is valid.

Validation: The process by which a rating is made valid.

Valid ATC License: An ATC license, recognized by the CARC, permitting a controller to exercise the privileges of the valid ratings included in that license, at the places and operational positions or sectors for which the ratings are endorsed.

Valid Rating: A rating permitting a controller to exercise the privileges of the rating in accordance with the endorsements included in the ATC license.

Air Traffic Controller License: A document that identifies a person as a qualified air traffic controller and contains personal, medical and professional qualifications including details of ratings, endorsements and current competence/validity.

Note: For ATS purposes, the expression ‘license’ used throughout the licensing documentation has the same meaning as the expressions ‘certificate of competence and license’, ‘license or certificate’ and ‘license’ used in the ICAO Convention. Normally, the grant of a student or air traffic controller license will authorize individuals to transmit on aeronautical wave bands.

Air Traffic Services Unit: A generic term meaning variously Air Traffic Control Unit’, ‘Flight Information Centre’ or ‘Air Traffic Services Reporting Office’.

Appropriate Air Traffic Services Authority: The relevant Authority designated by the, CARC responsible for providing air traffic services in the airspace concerned.

65.32 Air Traffic Control License.

Air traffic Control license and its Associated Ratings:

(a) Although ATC license has retained the basic concepts of the ICAO personal licensing (Annex1) , in that it uses rating to indicate the air traffic control disciplines in which controllers may provide an traffic control services as follow:

- (1) Aerodrome control rating.

(2) Approach, Approach radar control rating.

(3) Area, Area radar control rating.

(b) Student Air Traffic Controller License:

A student air traffic controller license has been introduced to enable designated licensing Authority to regulate persons training toward gaining an air traffic controller license. It indicates that the holder has successfully completed an approved ATC course of training and is qualified to commence On-The –Job training in the rating discipline (s).

NOTE:

An air traffic controller license holder who is training to obtain additional ratings, rating endorsements or unit endorsements will not be required to hold a student air traffic controller license; the ATC license that he/she has will permit a controller to provide an ATC service for which he/she does not hold rating or endorsement while completing the On- the-job training under supervision.

(c) Rating Endorsements: Rating Endorsements are endorsement associated with particular ratings to indicate the type of equipment associated with the provision of an air traffic control service in that rating discipline. The rating endorsement are also used to indicate specialist skill areas within particular rating discipline.

65.32a Required certificate and Rating.

No person may act as an air traffic controller at an air traffic control unit in connection with aircraft within the civilian controlled airspace unless he:

(a) Holds an air traffic controller license issued under this subpart; and

(b) Holds a valid rating and endorsement issued under this subpart appropriate to the air traffic control service provided by that air traffic control unit; except that a person who has completed an ATC approved course may act as student air traffic controller under the supervision of a certificated instructor for the purpose of gaining the experience qualifications required under section 65.39.

(c) Hold Third Class Medical Certificate as prescribed in part 61.23.

(d) Demonstrates proficiency in the English languages at least ICAO level 4 as of March 2008.

(e) Issue of Additional Rating(s) and Rating Endorsement(s).

Additional rating(s) and rating endorsement(s) will be issued to air traffic controller license holders who have successfully completed approved Unit Training and have gained a Unit endorsement by demonstrating they are competent to provide air traffic control services on the associated sectors or operational positions.

65.33 Eligibility requirements.

To be eligible for an air traffic controller certificate a person shall:

- (a) Be at least 21 years of age;
- (b) Be of good moral character;
- (c) Be able to read, write and understand the English language and speak it without accent or impediment of speech that would interfere with two-way radio conversation (pass level 4, ICAO proficiency test in English language for Air Traffic Controllers);
- (d) Hold a third class medical certificate as prescribed by JCAR part 67 and
- (e) Comply with sections [65.37](#), [65.39](#) and 65.41 of this subpart.

65.35 Examination Procedure.

- (a) The Practical test shall be conducted by ANS safety inspector and designated examiner who shall have the valid rating for the traffic control and Air Traffic Management safety officer.
- (b) The knowledge examination for rating and Validation shall be prepared and conducted by ANS safety inspector
- (c) The oral test shall be conducted by ANS safety inspector.

65.36 English Language proficiency Test.

As of 5 March 2008 , English language Proficiency Test shall be required for all Air Traffic Controllers, and shall be formally evaluated as follows:

- (a) ICAO expert level (Level 6) with no further evaluation;
- (b) ICAO level 5 which will be evaluated once every six years; and
- (c) ICAO level 4 which will be evaluated once in every three years.

65.37 Knowledge requirements: general.

Each applicant for an air traffic controller certificate shall pass a written test prescribed by Chief Commissioner/CEO covering the following:

(a) The applicable rules and regulations as set out in Air Traffic Control Manuals, Aeronautical Information Publication (AIP) and [part 91](#) of JCAR.

(b) Air Law:
rules and regulations relevant to the provision of a flight information service;

(c) Air Traffic Control Equipment:
Principles, use and limitations of equipment used in air traffic control;

(d) General Knowledge:
principles of flight; principles of operation and functioning of aircraft, power plants and systems; aircraft performance relevant to air traffic control operations;

(e) Human Performance and Limitations:
Human performance and Limitations relevant to provision of a flight information service;

(f) Language:
English Language is internationally designated for use in air traffic control and ability to speak such language without accent or impediment which would adversely affect level radio communications (ICAO level 4) is essential

(g) Meteorology:
Aeronautical meteorology; use and appreciation of meteorological documentation and information origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

(h) Navigation:
principles of air navigation; principle, limitation and accuracy of navigation system and visual aids;

(I) Operational Procedures:
Air Traffic Control, communication, radiotelephony and phraseology procedures (routine, non routine and emergency) use of the relevant aeronautical documentation; safety practice associated with air Traffic.

65.38 Training requirements: general

The training of air traffic controllers is considered to consist of Five phases:

(a) Initial Training:

Initial Training will include technical subjects, and ATC theory and practice including practical training conducted on simulators. The objective of Initial Training is to prepare a trainee for Pre-OJT at an ATC Unit.

(b) Transitional and Pre-OJT Training:

Transitional and Pre-OJT Training is conducted to prepare a trainee for OJT at an ATC Unit.

(c) On-the-Job Training (OJT):

Training conducted at an operational ATC position under the supervision of a qualified On-the-Job-Training instructor.

(d) Assessment of Training Progress During OJT,:

The trainee should be assessed at intervals to ensure satisfactory progress is being made, to organize additional training and set targets. It is the responsibility of the OJT instructor, or other authorized assessor, to determine when the trainee has reached the level of knowledge and skill required of an operational controller.

(e) Minimum Experience Requirements:

Before a student or trainee air traffic controller has a new rating validated, it is a requirement that an approved Unit Training Plan, which may include notified minimum experience time, has been successfully completed.

(f) Have demonstrated a safety practices associated with the Air traffic.

65.39 Experience Requirement: license.

Each applicant shall have:

(a) Satisfactorily completed a training course approved by the Chief Commissioner/CEO; and

(b) Completed not less than three (3) months of satisfactory service engaged in the control of actual air traffic under the supervision of an appropriately rated On-Job Training Instructor (OJTI) . The experience requirements specified in 65.40 may be credited as part of the experience specified in this paragraph.

65.40 Experience Requirements: ratings.

(a) The applicant shall have satisfactorily completed an approved training course.

(b) The applicant shall have provided, satisfactorily, under the supervision of an appropriately rated On-job Training Instructor (OJTI):

(1) Aerodrome control rating: an aerodrome control service , for a period of not less than(90) hours or three (3) months, whichever is greater at the unit for which the rating is sought ; and

(2) Approach control procedural, approach control radar, area control procedural, area control radar rating: the control service for which the rating is sought , for a period of not less than (180) hours or three months, which ever is greater , at the unit for which the rating is sought.

(c) Approach Control Radar and Area Control Radar ratings : the applicant shall have satisfactorily completed approved approach and area procedural training courses in addition to the required radar training courses.

(d) The experience specified in paragraph (b) above shall have been completed within the six (6) months period immediately preceding application.

(e) When the applicant already holds an air traffic controller rating in another category, or the same rating for another unit, the experience specified in paragraph (b) above can be reduced by published document approved by the Chief Commissioner/CEO.

(f) When two air traffic control ratings are sought concurrently, the requirements for each rating shall be applied. These requirements shall not be less than those of the more demanding rating.

65.41 Air traffic control ratings: knowledge requirements.

(a) Aerodrome Control Rating.

Each applicant for an aerodrome control rating shall have passed a written test covering the following:

- (1) Aerodrome layout, physical characteristics and visual aids;
- (2) Airspace structure;
- (3) Applicable rules, regulations and source of information;
- (4) Air navigation facilities;
- (5) Air traffic equipment and its use;

- (6) Terrain and prominent landmarks;
- (7) Characteristics of air traffic;
- (8) Weather phenomena; and
- (9) Emergency and Search and rescue plans.

(b) Approach / Area Control (non Radar):

Each applicant for an approach/Area control rating shall have passed a written test covering the following:

- (1) Airspace structure;
- (2) Applicable rules, regulations and source of information;
- (3) Air navigation facilities;
- (4) Air traffic equipment and its use;
- (5) Terrain and prominent landmarks;
- (6) Characteristics of air traffic and traffic flow;
- (7) Weather phenomena; and
- (8) Emergency and Search and rescue plans.

(c) Approach/Area Control (Radar):

Each applicant for an approach/Area control rating shall have passed a written test covering the following:

- (1) Airspace structure;
- (2) Applicable rules, regulations and source of information;
- (3) Air navigation facilities;
- (4) Air traffic equipment and its use;
- (5) Terrain and prominent landmarks;
- (6) Characteristics of air traffic and traffic flow;
- (7) Weather phenomena;
- (8) Emergency and Search and rescue plans.
- (9) Principles use and limitations of radar, other surveillance systems and associated equipment;
- (10) Procedures for the provision of approach or area radar control services as appropriate; and
- (11) Procedures to ensure terrain clearance as appropriate.

(d) Instructor On- the Job Training (OJTI) unit rating .

A valid rated controller may be awarded a Unit On Job Training Instructors rating when he has:

- (1) Successfully completed an approved OJT and instructor's course;
- (2) Hold the appropriate rating at the concerned Unit for at least five years.
- (3) An on job training instructor (OJTI) shall demonstrate the ability to speak English language without accent or impediment as minimum ICAO English Proficiency level (4).
- (4) Has demonstrated the ability to exercise the privileges of the rating by passing an examination test that is acceptable to the CARC.
- (5) Has completed an approved Instructor Training Course (ITC) or equivalent.

(e) Examiners unit rating.

A valid rated controller may be awarded a Unit Examiners rating when he has:

- (1) Successfully completed an approved instructors and examiners course;
- (2) Hold the appropriate rating at the concerned Unit for at least five years.
- (3) An Examiner shall demonstrate the ability to speak English language without accent or impediment as minimum ICAO English Proficiency level (4).
- (4) Has demonstrated the ability to exercise the privileges of the rating by passing an examination test that is acceptable to the CARC.
- (5) Has completed an approved Examination Techniques Course or equivalent.
- (6) Has been served as an OJTI for a minimum of three years.

(f) Supervisors unit rating.

A valid rated controller may be awarded a unit supervisor's rating to the unit when he has:

- (1) Successfully completed an approved supervisor's course;
- (2) Hold the appropriate ratings at the concerned Unit for at least five years.
- (3) A supervisor shall demonstrate the ability to speak English language without accent or impediment as minimum ICAO English Proficiency level (4).
- (4) Has demonstrated the ability to exercise the privileges of the rating by passing an examination test that is acceptable to the CARC.

(5) Has completed an approved supervisor Training Course.

65.42 Skill requirements.

The holder of the air traffic controller license and rating shall:

- (a) Have passed practical and oral tests on the items listed in 65.41 that are applicable to each operating position at the control unit at which the rating is sought and;
- (b) Demonstrate the procedures that are applicable to the operating position which are required by the designated person conducting the examination at which the rating is sought and;
- (c) Provide the necessary skills and experience to an appropriate level of competence to enable him to provide an air traffic control service.

65.43 Rating validity.

(a) General:

If throughout any period of 6 month , the holder of the licence has not at any time provided at a particular place the type of air traffic control service specified in the licence, the rating concerned and its associated endorsements , If any , shall cease to be valid for that place at the end of that period ; the holder of the licence and the in charge of the unit shall forthwith inform the Authority to that effect and shall either arrange for renewal or revalidation of the rating concerned by the Authority .

(b) To renew the rating validity after a period of more than 6 months (180 days) , and less than one year during which a controller has not provided appropriate ATC service, the controller is required to work for a minimum period of 7 days or 20 hours whichever is greater under the supervision of appropriately OJTI;

(c) To renew the validity for the rating after a period of one year and less than 36 calendar months, the controller shall:

(1) Be required to work for a minimum period of one month or 30 hours whichever is greater under the supervision of appropriately OJTI .

(2) Have a current medical certificate class three according to JCAR Part 67.

(3) Pass a written examination as per 65.41

(4) Pass a practical test as per 65.42

(d) To renew the validity for the rating after a period of 36 calendar months or more the controller shall:

(1) Attend a refresher course set By Air Navigation Safety and Standard Department , and approved by CARC for not less than four weeks for the rating concerned, including the handling of normal and abnormal situations.

(2) Be required to work for a minimum period of three months or 90 hours whichever is greater under the supervision of appropriately rated air traffic controller, OJTI.

(3) Pass a practical test as per 65.42

(4) Pass a written examination as per 65. 41; and

(5) Have a current medical certificate class three according to JCAR Part 67.

(6) Pass as a minimum level four of the ICAO English Language Proficiency Test for Air Traffic Controllers.

(7)Attend an approved ATC Human Factors Course for a minimum of one day.

65.43a Currency and Proficiency of ratings.

Each applicant for air traffic control rating shall not exercise the privileges of air traffic control rating unless on annually basis:

(a) The controller has satisfactorily passed by the proficiency check;

(b) Has participated in an approved appropriate course of refresher training for five days to maintain competency including the handling of emergencies and operations under conditions with failed and degraded facilities and system;

(c) Has attended an approved ATC Human Factor course for one day.

(d) Demonstrates the ability of standard phraseology competency and shall demonstrates the ability to the English competency ICAO level 4 by March 2008.

65.45 Performance of duties and endorsements.

(a) An air traffic controller shall perform his /her duties in accordance with the limitations on his/her license rating, the procedures and practices prescribed in the CARC publications Air Traffic Control Manual(s) and ICAO annexes to provide a safe, orderly and expeditious flow of air traffic.

(b) No person may act as an air traffic controller under a certificate issued to him/her under this subpart unless he/she has in his personal possession an appropriate current medical certificate as prescribed by [part 67](#) of JCAR.

(c) Each person holding an air traffic controller certificate shall keep it readily available when performing duties at an air traffic control unit and shall present that certificate and his/ her medical certificate or both for inspection at the request of the Chief Commissioner/CEO or the authorized representative

(d) An air traffic controller may not perform duties under his/her certificate during any period of known physical deficiency that would make him/ her unable to meet the physical requirements for his current medical certificate. However, if the deficiency is temporary, he/she may perform duties that are not affected by it whenever another certificated and qualified operator is present and on duty.

(e) Unit endorsements are endorsements associated with specific ratings and rating endorsements which indicate the air traffic control Unit where the license holder provides an air traffic control service and the individual sectors, groups of sectors or operational positions on which a controller is competent to provide the appropriate air traffic control service. Unit endorsements may also indicate the specific types of surveillance equipment used by the Unit in the provision of air traffic control services on specific sectors, groups of sectors or operational positions.

(f) License endorsements are endorsements associated with the licence, but not with any particular rating or rating endorsement. Currently, the licence endorsements associated with the ATC licence are:

(1) On-the-Job-Training Instructor (OJTI) licence endorsement. This endorsement indicates that the skills to train student air traffic controllers or trainee controllers are generic to all ATC rating disciplines and that an OJTI may use the licence endorsement to provide On-the-Job Training (OJT) in any rating discipline for which he holds a valid rating and has the appropriate operational experience).

(2) Air Traffic Control Examiner; and

(3) Proficiency Examiner

65.46 Use of prohibited drugs.

(a) The following definitions apply for the purposes of this section:

(1) An employee is a person who performs an air traffic control function for an employer. For the purpose of this section, a person who performs such a function pursuant to a contract with an employer is considered to be performing that function for the employer.

(2) An "employer" means an air traffic control facility operated by the CARC or by or under contract to the Jordan military that employs a person to perform an air traffic control function.

(b) No employer may use any contractor to perform an air traffic control function unless that contractor provides each of its employees performing that function for the employer and his or her supervisor with the training about alcohol misuse prevention programme.

(c) No employer may knowingly use any person to perform in his or her system, nor may any person perform for an employer, either directly or by contract, any air traffic control function while that person has a prohibited drug, as defined in appendix I to part 121 of JCAR, in his or her system.

(d) No employer shall knowingly use any person to perform, nor may any person perform for an employer, either directly or by contract, any air traffic control function if the person has a verified positive drug test result on or has refused to submit to a drug test required by appendix I to [part 121](#) of JCAR and the person has not met the requirements of appendix I to [part 121](#) of JCAR for returning to the performance of safety-sensitive duties.

(e) Each employer shall test each of its employees who performs any air traffic control function in accordance with appendix I to [part 121](#) of the JCAR. No employer may use any contractor to perform any air traffic control function unless that contractor tests each employee performing such a function for the employer in accordance with that appendix.

65.46a Misuse of alcohol.

(a) This section applies to employees who perform air traffic control duties directly or by contract for an employer that is an air traffic control facility operated by the CARC or Jordan Armed Forces (covered employees).

(b) Alcohol concentration. No employee shall report for duty or remain on duty requiring the performance of safety-sensitive functions while having an alcohol concentration of 0.04 or greater. No employer having actual knowledge that an employee has an alcohol concentration of 0.04 or greater shall permit the employee to perform or continue to perform safety-sensitive functions.

(c) On-duty use. No employee shall use alcohol while performing safety-sensitive functions. No employer having actual knowledge that a covered employee is using alcohol while performing safety-sensitive functions shall permit the employee to perform or continue to perform safety-sensitive functions.

(d) Pre-duty use. No employee shall perform air traffic control duties within 8 hours after using alcohol. No employer having actual knowledge that such an employee has used alcohol within 8 hours shall permit the employee to perform or continue to perform air traffic control duties.

(e) Use following an accident. No employee who has actual knowledge of an accident involving an aircraft for which he or she performed a safety-sensitive function at or near the time of the accident shall use alcohol for 8 hours following the accident, unless he or she has been given a post-accident test under [appendix J to part 121](#) of JCAR, or the employer has determined that the employee's performance could not have contributed to the accident.

(f) Refusal to submit to a required alcohol test. No employee shall refuse to submit to a post-accident, random, reasonable suspicion, or follow-up alcohol test required under [appendix J to part 121](#) of JCAR. No employer shall permit an employee who refuses to submit to such a test to perform or continue to perform safety-sensitive functions.

65.46b Testing for alcohol.

(a) Each employer must establish an alcohol misuse prevention program in accordance with the provisions of appendix J to part 121 of the JCAR.

(b) No employer shall use any person who meets the definition of employee in appendix J to part 121 to perform a safety-sensitive function listed in that appendix unless such person is subject to testing for alcohol misuse in accordance with the provisions of appendix J.

65.47 Maximum hours.

Except in an emergency, a certificated air traffic controller shall be relieved of all duties for at least 24 hours at least once during each 7 consecutive days.
A certificated air traffic controller shall not serve or be required to serve:

- (a) For more than 12 consecutive hours; or
- (b) For more than 12 hours during a period of 24 hours, unless he has a rest period of at least 8 consecutive hours commencing at or before the end of the 12 hours of duty.
- (c) For Radar Control no more than 2 continuous hours duty without 20 minutes relief period.
- (d) For procedural Control no more than 3 continuous hours duty without 30 minutes relief period.

65.49 General Operating Rules.

(a) No person may act as an air traffic controller under a certificate issued to him/her under this subpart unless he/she has in his personal possession an appropriate current medical certificate as prescribed by [part 67](#) of JCAR.

(b) An air traffic controllers license remains valid for 36 calendar months provided that:

(1) The holder possess a current medical certificate as prescribed by part 67 of JCAR.

(2) The license has not been suspended or revoked.

(c) An air traffic controller may not perform duties under his/ her certificate during any period of known physical deficiency including pregnancy that would make him/ her unable to meet the physical requirements for his/ her current medical certificate. However, if the deficiency is temporary, he / she may perform duties that are not affected by it whenever another certificated and qualified controller is present and on duty.

(d) An air traffic controller may have privileges of His/ Her seniority in the unit after two (2) years service from the time of suspension- revocation expiry in the same unit

65.49a Deleted.

SUBPART- C

Aircraft Dispatchers

65.51 Certificate required.

(a) No person may serve as an aircraft dispatcher (exercising responsibility with the pilot in command in the operational control of a flight) in connection with any civil aircraft unless he has in his personal possession a current aircraft dispatcher certificate issued under this subpart.

(b) Each person who holds an aircraft dispatcher certificate shall present it for inspection upon the request of the Chief Commissioner/CEO or any law enforcement officer.

65.53 Eligibility requirement: general.

(a) To be eligible to take the aircraft dispatcher knowledge test, a person must be at least 19 years of age.

(b) To be eligible for an aircraft dispatcher certificate, a person must:

- (1) Be at least 21 years of age;
- (2) Be able to read, speak, write, and understand the English language;
- (3) Pass the required knowledge by 65.55, 65.57, and 65.59.
- (4) Pass the required practical test prescribed by 65.59 of this part;
- (5) Comply with the requirements of 65.57 of this part.

65.55 Knowledge requirements.

(a) An applicant for an aircraft dispatcher certificate must pass a written test on:

- (1) Applicable Civil Aviation Regulations of this JCAR that relate to airline transport pilot privileges, limitations, and flight operations;
- (2) Meteorology, including knowledge of and effects of fronts, frontal characteristics, cloud formation, icing, and upper-air data;
- (3) General system of weather and NOTAM collection, dissemination, and use;
- (4) Interpretation and use of weather charts, maps, forecasts, reports, abbreviations, and symbols;
- (5) National weather service functions as they pertain to operations in the National Airspace System;

- (6) Wind shear and microburst awareness, identification, and avoidance;
- (7) Principles of air navigation under instrument meteorological conditions in the National Airspace System;
- (8) Air traffic control procedures and pilot responsibilities as they relate to enroute operations, terminal area and radar operations, and Instrument departure and approach procedures;
- (9) Aircraft loading, weight and balance, use of charts, tables, formulas, and computations, and their effect on aircraft performance;
- (10) Aerodynamics relating to an aircraft's flight characteristics and performance in normal and abnormal flight regimes;
- (11) Human factors;
- (12) Aeronautical decision making and judgment; and
- (13) Crew resource management, including crew communication and coordination.

(b) The applicant must present documentary evidence satisfactory to the **CARC** of having passed an aircraft dispatcher knowledge test within the preceding 24 calendar months.

65.57 Experience requirements.

An applicant for an aircraft dispatcher certificate must present documentary evidence satisfactory to the Chief Commissioner/CEO that he has the experience prescribed in any one of the following paragraphs:

(a) A total of at least two of the three years before the date he applies, in scheduled air carrier operations or other aircraft operations that the Chief Commissioner/CEO finds provide equivalent experience:

- (1) As a pilot with at least a commercial pilot licence;
- (2) As a flight radio operator or ground radio operator;
- (3) As a meteorologist;
- (4) Performing the duties of an aircraft dispatcher or his assistant; or

(5) Performing other duties that the Chief Commissioner/CEO finds provide equivalent experience.

(b) A total of at least two of the three years before the date he applies, performing duties as a certificated air route traffic controller, or a certificated air traffic control tower operator.

(c) A total of at least one of the two years before the date he applies, as an assistant in dispatching scheduled air carrier aircraft performing the duties of an aircraft dispatcher under the direct supervision of a certificated dispatcher.

(d) Within the 90-day period before he applies, successful completion of a JCAR approved course of instruction as provided in Appendix A of this part.

An applicant is entitled to credit any combination of experience in paragraphs (a) and (b) or paragraphs (a) and (c), of this section if the total of that experience is at least two years.

65.59 Skill requirements.

An applicant for an aircraft dispatcher certificate must pass a practical test with respect to any one type of large aircraft currently used in air carrier operations, on the practical test standards outlined in appendix A of this part.

65.61 Aircraft dispatcher certification courses: Content and minimum hours.

(a) An approved aircraft dispatcher certification course must:

(1) Provide instruction in the areas of knowledge and topics listed in appendix A of this part;

(2) Include a minimum of 200 hours of instruction.

(b) An applicant for approval of an aircraft dispatcher course must submit an outline that describes the major topics and subtopics to be covered and the number of hours proposed for each.

(c) Additional subject headings for an aircraft dispatcher certification course may also be included, however the hours proposed for any subjects not listed in appendix A of this part must be in addition to the minimum 200 course hours required in paragraph (a) of this section.

(d) For the purpose of completing an approved course, a student may substitute previous experience or training for a portion of the minimum 200 hours of training. The course operator determines the number of hours of credit based on

an evaluation of the experience or training to determine if it is comparable to portions of the approved course curriculum. The credit allowed, including the total hours and the basis for it, must be placed in the student's record required by 65.70(a) of this part.

65.63 Aircraft dispatcher certification courses: Application, duration, and other general requirements.

(a) Application. Application for original approval of an aircraft dispatcher certification course or the renewal of approval of an aircraft dispatcher certification course under this part must be:

- (1) Made in writing to the Chief Commissioner/CEO;
- (2) Accompanied by two copies of the course outline required under 65.61(b) of this part, for which approval is sought;
- (3) Accompanied by a description of the equipment and facilities to be used; and
- (4) Accompanied by a list of the instructors and their qualifications.

(b) Duration. Unless withdrawn or canceled, an approval of an aircraft dispatcher certification course of study expires:

- (1) On the last day of the 24th month from the month the approval was issued; or
- (2) Except as provided in paragraph (f) of this section, on the date that any change in ownership of the school occurs.

(c) Renewal. Application for renewal of an approved aircraft dispatcher certification course must be made within 30 days preceding the month the approval expires, provided the course operator meets the following requirements:

- (1) At least 80 percent of the graduates from that aircraft dispatcher certification course, who applied for the practical test required by 65.59 of this part, passed the practical test on their first attempt; and
- (2) The aircraft dispatcher certification course continues to meet the requirements of this subpart for course approval.

(d) Course revisions. Requests for approval of a revision of the course outline, facilities, or equipment must be in accordance with paragraph (a) of this section. Proposed revisions of the course outline or the description of facilities and equipment must be submitted in a format that will allow an entire page or

pages of the approved outline or description to be removed and replaced by any approved revision. The list of instructors may be revised at any time without request for approval, provided the minimum requirements of 65.67 of this part are maintained and the Chief Commissioner/CEO is notified in writing.

(e) Withdrawal or cancellation of approval. Failure to continue to meet the requirements of this subpart for the approval or operation of an approved aircraft dispatcher certification course is grounds for withdrawal of approval of the course. A course operator may request cancellation of course approval by a letter to the Chief Commissioner/CEO. The operator must forward any records to the CARC as requested by the Chief Commissioner/CEO.

(f) Change in ownership. A change in ownership of a part 65, appendix A-approved course does not terminate that aircraft dispatcher certification course approval if, within 10 days after the date that any change in ownership of the school occurs:

- (1) Application is made for an appropriate amendment to the approval; and
- (2) No change in the facilities, personnel, or approved aircraft dispatcher certification course is involved.

(g) Change in name or location. A change in name or location of an approved aircraft dispatcher certification course does not invalidate the approval if, within 10 days after the date that any change in name or location occurs, the course operator of the part 65, appendix A-approved course notifies the Chief Commissioner/CEO, in writing, of the change.

65.65 Aircraft dispatcher certification courses: Training facilities.

An applicant for approval of authority to operate an aircraft dispatcher course of study must have facilities, equipment, and materials adequate to provide each student the theoretical and practical aspects of aircraft dispatching. Each room, training booth, or other space used for instructional purposes must be temperature controlled, lighted, and ventilated to conform to local building, sanitation, and health codes. In addition, the training facility must be so located that the students in that facility are not distracted by the instruction conducted in other rooms.

65.67 Aircraft dispatcher certification courses: Personnel.

(a) Each applicant for an aircraft dispatcher certification course must meet the following personnel requirements:

(1) Each applicant must have adequate personnel, including one instructor who holds an aircraft dispatcher certificate and is available to coordinate all training course instruction.

(2) Each applicant must not exceed a ratio of 25 students for one instructor.

(b) The instructor who teaches the practical dispatch applications area of the appendix A course must hold an aircraft dispatchers certificate

65.70 Aircraft dispatcher certification courses: Records.

(a) The operator of an aircraft dispatcher course must maintain a record for each student, including a chronological log of all instructors, subjects covered, and course examinations and results. The record must be retained for at least 3 years after graduation. The course operator also must prepare, for its records, and transmit to the Chief Commissioner/CEO not later than January 31 of each year, a report containing the following information for the previous year:

(1) The names of all students who graduated, together with the results of their aircraft dispatcher certification courses.

(2) The names of all the students who failed or withdrew, together with the results of their aircraft dispatcher certification courses or the reasons for their withdrawal.

(b) Each student who successfully completes the approved aircraft dispatcher certification course must be given a written statement of graduation, which is valid for 90 days. After 90 days, the course operator may revalidate the graduation certificate for an additional 90 days if the course operator determines that the student remains proficient in the subject areas listed in appendix A of this part.

SUBPART-D
Mechanics

65.71 Eligibility requirements: General.

(a) To be eligible for a mechanic certificate and associated ratings, a person must:

- (1) Be at least 18 years of age;
- (2) Hold a General Secondary Certificate (Tawjihi of Jordan) or equivalent foreign certificate with pass result;
- (3) Have passed all of the prescribed tests within a period of 24 months;
- (4) Pass English evaluation test to ensure his ability to read, write, speak, and understand English language. The English test must be evaluated against a standard accepted by the Chief Commissioner/CEO;
- (5) Comply with the sections of this subpart that apply to the rating he seeks; and
- (6) Hold at least a valid third-class medical certificate issued under part MED of this JCAR.

(b) A graduation certificate from an approved aviation maintenance technician school acceptable to the Chief Commissioner/CEO and appropriate to the mechanic certificate and rating sought; or

(c) The applicant presents documentary evidence, satisfactory to the CARC in accordance with provisions of 65.77; or

(d) The applicant holds a valid licence issued by another Contracting State in accordance with Annex 1 acceptable to CARC.

(e) A certificated mechanic who applies for an additional rating must meet the requirements of 65.77 and, within a period of 24 months, pass the basic examinations and tests prescribed by 65.75 and in accordance with the provisions of 65.79.

65.73 Ratings.

The following ratings are issued under this subpart:

- (1) Airframe.
- (2) Power plant.
- (3) Airframe and power plant.

65.74 Duration of Certificate.

(a) General. The holder of a certificate with an expiration date may not, after that date, exercise the privileges of that certificate.

(b) Mechanic Certificate. A Mechanic certificate expires 36 calendar months from the month in which it is issued.

65.75 Knowledge requirements and skill requirements.

(a) Each applicant for a mechanic certificate or rating must, after meeting the applicable experience requirements of 65.77, pass the basic examination and practical test covering the construction and maintenance of aircraft appropriate to the rating he seeks, the regulations in this subpart, and the applicable provisions of parts MED, 145 and 91 of the JCAR. The basic principles covering the installation and maintenance of propellers are included in the power plant test.

(b) The applicant must pass the prescribed basic examination and practical tests on the rating he seeks. The tests cover the applicant's basic skill in performing practical projects on the subjects covered by the examination test for that rating. An applicant for a power plant rating must show his ability to make satisfactory minor repairs to, and minor alterations of, propellers. A report of the examination test shall be sent to the applicant.

(c) An applicant for a mechanic certificate or change in rating shall demonstrate, by way of an examination, a level of knowledge in the appropriate rating in accordance to this subpart. The basic knowledge examinations shall be conducted by CARC.

65.77 Experience requirements.

(a) Each applicant for a mechanic certificate or rating must present documentary evidence, satisfactory to the CARC, of:

(1) At least 20 months of practical experience with the procedures, practices, materials, tools, machine tools and equipment generally used in constructing, maintenance or altering airframes or power plants appropriate to the rating sought;

(2) At least 40 months of practical experience concurrently performing the duties appropriate to both the airframe and power plant ratings;

(3) A certificate of graduation from a certificated aviation maintenance technician school acceptable to CARC and appropriate to the mechanic certificate and ratings sought;

(b) The Chief Commissioners/CEO may authorize a deviation from the experience requirements of paragraph (a) of this section, if he finds from documentation presented by the applicant that he has acquired other aeronautical experience that would qualify him to be eligible for mechanic certification. The CARC may issue instructions to explain such cases.

65.79 Examination standards.

(a) Satisfactory completion of training shall be demonstrated through an examination and demonstration of practical experience on the aircraft ,

(b) All basic examinations must be carried out using the multi-choice question format and essay questions.

(c) All examination questions shall be kept in a secure manner prior to an examination, to ensure that applicants will not know which particular questions will form the basis of the examination.

(d) Basic examinations shall follow the standard specified in Appendix –A, Appendix –B, Appendix-C and D to Part 65 as appropriate.

(e) Basic examinations shall follow the standard specified in Appendix –A, Appendix –B, Appendix-C and D to Part 147 as appropriate.

(e) An essay examination shall be followed automatically after passing the multi-choice questions.

(f) After passing the examinations prescribed in 65.79(d) and (e), the examinee will be eligible to proceed to the practical tests.

(g) Applicants shall be separated from each other so that they cannot read each other's examination papers. They may not speak to any person other than the examination officer.

(h) The pass mark for each multi-choice part of the examination is 70 percent.

(i) The pass mark for each essay question is 60 percent, that is the candidates answer must contain 60 percent of the required key points addressed by the question and no significant error related to any required key point.

65.81 General privileges and limitations.

(a) A certificated mechanic may perform or supervise the maintenance, preventive maintenance or alteration of an aircraft or appliance, or a part thereof, for which he is rated (but excluding major repairs to, and major alterations of, propellers, and any repair to, or alteration of, instruments), and may perform additional duties in accordance with 65.85, 65.87, and 65.95. However, he may not supervise the maintenance, preventive maintenance, or alteration of, or approve and return to service, any aircraft or appliance, or part thereof, for which he is rated unless he has satisfactorily performed the work concerned at an earlier date. If he has not so performed that work at an earlier date, he may show his ability to do it by performing it to the satisfaction of the Chief Commissioner /CEO or under the direct supervision of a certificated and appropriately rated mechanic, or a certificated repairman, who has had previous experience in the specific operation concerned.

(b) A certificated mechanic may not exercise the privileges of his certificate and rating unless he understands the current instructions of the manufacturer, and the maintenance manuals, for the specific operation concerned.

(c) A certificated mechanic may not exercise certification privileges unless:

(1) He/ She or the mechanic in compliance with the applicable requirements of JCAR Part M, para M.1(e), M.502 (b), M.604, M.606, M607 and Subpart F of Part M and/or JCAR Part 145 ,paragraph 145.30, 145.35 and JCAR Part 147.23.

(2) He/ She or the mechanic is in the preceding two-years period he/she has, either had six months of maintenance experience in accordance with the provision prescribed in 65.83.

65.83 Recent experience requirements.

A certificated mechanic may not exercise the privileges of his certificate and rating unless, within the preceding 24 months:

- (a) has found that he is able to do that work; or
- (b) He has, for at least 6 months:
 - (1) Served as a mechanic under his certificate and rating;
 - (2) Technically supervised other mechanics;
 - (3) Supervised, in an executive capacity, the maintenance or alteration of aircraft; or
 - (4) Been engaged in any combination of paragraph (b)(1), (2), or (3) of this section.

65.84 Certificate: Renewal Requirements.

(a) The holder of a Mechanic Certificate may apply for renewal if he/she meets one of the following:

- (1) Submits to CARC a signed maintenance experience statement from an approved organization or from a foreign organization accepted to CARC, showing that he/she has either had experience in the inspection, servicing or maintenance of an aircraft, engines or component or
- (2) Passes the renewal knowledge examination of CARC.

(b) Holds at least a valid third-class medical certificate issued under part 67 of JCAR.

65.85 Airframe rating; additional privileges.

A certificated mechanic with an airframe rating may approve and return to service an airframe, or any related part or appliance, after he has performed, supervised, or inspected its maintenance or alteration (excluding major repairs and major alterations). In addition, he may perform the 100-hour inspection required by part 91 of JCAR on an airframe, or any related part or appliance, and approve and return it to service.

65.87 Power plant rating; additional privileges.

A certificated mechanic with a power plant rating may approve and return to service a power plant or propeller or any related part or appliance, after he has performed, supervised, or inspected its maintenance or alteration (excluding major repairs and major alterations). In addition, he may perform the 100-hour inspection required by part 91 of JCAR on a power plant or propeller, or any part thereof, and approve and return it to service.

65.88 Airframe and Power plant rating: additional privileges.

Only a certificated mechanic with both airframe and power plant ratings may approve and return to service an aircraft. In addition, he may approve and return to service an airframe, a power plant or propeller or any related part or appliance, after he has performed, supervised, or inspected its maintenance or alteration (excluding major repairs and major alterations). He may also perform the 100-hour inspection required by part 91 of the JCAR on an aircraft, an airframe, a power plant or propeller or any part thereof, and approve and return it to service.

65.89 Display of certificate.

Each person who holds a mechanic certificate shall keep it within the immediate area where he normally exercises the privileges of the certificate and shall present it for inspection upon the request of the Chief Commissioner/CEO or of any national or local law enforcement officer.

65.91 Inspection authorization.

(a) An application for an inspection authorization is made on a form and in a manner prescribed by the Chief Commissioner/CEO.

(b) An applicant who meets the requirements of this section is entitled to an inspection authorization.

(c) To be eligible for an inspection authorization, an applicant must:

(1) Hold a currently effective mechanic certificate with both an airframe rating and a power plant rating, each of which is currently effective and has been in effect for a total of at least 3 years;

(2) Have been actively engaged, for at least the 2-year period before the date he applies, in maintaining aircraft certificated and maintained in accordance with this JCAR;

(3) Have a fixed base of operations at which he may be located in person or by telephone during a normal working hours but it need not be the place where he will exercise his inspection authority;

(4) Have available to him the equipment, facilities, and inspection data necessary to properly inspect airframes, power plants, propellers, or any related part or appliance; and

(5) Pass a written test on his ability to inspect according to safety standards for returning aircraft to service after major repairs and major alterations and annual and progressive inspections performed under part M of JCAR.

An applicant who fails the test prescribed in paragraph (c)(5) of this section may not apply for retesting until at least 90 days after the date he failed the test.

65.92 Inspection authorization: Duration.

(a) Each inspection authorization expires after one year period of the issuance date. However, the holder may exercise the privileges of that authorization only while he holds a currently effective mechanic certificate with both a currently effective airframe rating and a currently effective power plant rating.

(b) An inspection authorization ceases to be effective whenever any of the following occurs:

(1) The authorization is surrendered, suspended, or revoked.

(2) The holder no longer has a fixed base of operation.

(3) The holder no longer has the equipment, facilities, and inspection data required by 65.91(c) (3) and (4) for issuance of his authorization.

(c) The holder of an inspection authorization that is suspended or revoked shall, upon the Chief Commissioner/CEO 's request, return it to the Chief Commissioner/CEO.

65.93 Inspection authorization: Renewal.

(a) To be eligible for renewal of an inspection authorization for a 1-year period an applicant must present evidence annually, to the Chief Commissioner/CEO that the applicant still meets the requirements of 65.91(c) (1) through (4) and must show that, during the current period that the applicant held the inspection authorization, the applicant:

(1) Has performed at least one annual inspection for each 90 days that the applicant held the current authority; or

(2) Has performed inspections of at least two major repairs or major alterations for each 90 days that the applicant held the current authority; or

(3) Has performed or supervised and approved at least one progressive inspection in accordance with standards prescribed by the Chief Commissioner/CEO; or

(4) Has attended and successfully completed a refresher course, acceptable to the Chief Commissioner/CEO, of not less than 8 hours of instruction during the 12-month period preceding the application for renewal; or

(5) Has passed on oral test by CARC inspector to determine that the applicant's knowledge of applicable regulations and standards is current.

(b) The holder of an inspection authorization that has been in effect for less than 90 days before the expiration date need not comply with paragraphs (a) (1) through (5) of this section.

65.95 Inspection authorization: Privileges and limitations.

(a) The holder of an inspection authorization may:

(1) Inspect and approve for return to service any aircraft or related part or appliance (except any aircraft maintained in accordance with a continuous airworthiness program under part OPS1 of JCAR) after a major repair or major alteration to it in accordance with part 43 of JCAR, if the work was done in accordance with technical data approved by the Chief Commissioner/CEO; and

(2) Perform an annual, or perform or supervise a progressive inspection according to 43.13 and 43.15 of JCAR.

(b) When he exercises the privileges of an inspection authorization the holder shall keep it available for inspection by the aircraft owner, the mechanic submitting the aircraft, repair, or alteration for approval (if any), and shall present it upon the request of the Chief Commissioner/CEO or of any national, or local law enforcement officer.

(c) If the holder of an inspection authorization changes his fixed base of operation, he may not exercise the privileges of the authorization until he has notified the Chief Commissioner/CEO in writing, of the change.

SUBPART-E
Repairmen

65.101 Eligibility requirements: General.

(a) To be eligible for a repairman certificate a person must:

- (1) Be at least 18 years of age;
- (2) Be specially qualified to perform maintenance on aircraft or components thereof, appropriate to the job for which he is employed;
- (3) Be employed for a specific job requiring those special qualifications by a certificated repair station, or by a certificated commercial operator or certificated air carrier, that is required by its operating certificate or approved operations specifications to provide a continuous airworthiness maintenance program according to its maintenance manuals;
- (4) Be recommended for certification by his employer;
- (5) Pass the required knowledge and practical tests through demonstration of skills, to the satisfaction of the Chief Commissioner/CEO, as able to satisfactorily maintain aircraft or component, appropriate to the job for which he is employed.
- (6) Have either:
 - (i) At least 24 months of practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment generally used in the maintenance duties of the specific job for which the person is to be employed and certificated; or
 - (ii) Completed formal training that is acceptable to Chief Commissioner/CEO and is specifically designed to qualify the applicant for the job on which the applicant is to be employed;
- (7) Be able to read, write, speak, and understand the English language; and
- (8) (8) Hold at least a valid third – class medical certificate issued under part M of JCAR; or

(b) The applicant hold a valid licence issued by another Contracting State in accordance with Annex 1 acceptable to CARC.

(c) This section does not apply to the issuance of repairman certificates (experimental aircraft builder) under 65.104.

65.102 Duration of certificates.

A certificate or rating issued under this subpart expires 36 calendar months from the month in which it is issued, or cease employment by the Company.

65.103 Repairman certificate: Privileges and limitations.

(a) A certificated repairman may perform or supervise the maintenance, preventive maintenance, or alteration of aircraft or aircraft components appropriate to the job for which the repairman was employed and certificated, but only in connection with duties for the certificate holder by whom the repairman was employed and recommended.

(b) A certificated repairman may not perform or supervise duties under the repairman certificate unless the repairman understands the current instructions of the certificate holder by whom the repairman is employed and the manufacturer's instructions for continued airworthiness relating to the specific operations concerned.

65.104 Repairman certificate- experimental aircraft builder: Eligibility, privileges and limitations.

(a) To be eligible for a repairman certificate (experimental aircraft builder), an individual must:

- (1) Be at least 23 years of age;
- (2) Be the primary builder of the aircraft to which the privileges of the certificate are applicable;
- (3) Show to the satisfaction of the Chief Commissioner/CEO that the individual has the requisite skill to determine whether the aircraft is in a condition for safe operations; and
- (4) Be a Jordanian citizen or an individual citizen of a foreign country who has lawfully been admitted for permanent residence in Jordan.

(b) The holder of a repairman certificate (experimental aircraft builder) may perform condition inspections on the aircraft constructed by the holder in accordance with the operating limitations of that aircraft.

(c) Section 65.103 does not apply to the holder of a repairman certificate (experimental aircraft builder) while performing under that certificate.

65.105 Display of certificate.

Each person who holds a repairman certificate shall keep it within the immediate area where he normally exercises the privileges of the certificate and shall present it for inspection upon the request of the Chief Commissioner/CEO or of any law enforcement officer.

**SUBPART-F
Parachute Riggers**

65.111 Certificate required.

(a) No person may pack, maintain, or alter any personnel-carrying parachute intended for emergency use in connection with civil aircraft of Jordan (including the reserve parachute of a dual parachute system to be used for intentional parachute jumping) unless that person holds an appropriate current certificate and type rating issued under this subpart and complies with 65.127 through 65.133.

(b) No person may pack, maintain, or alter any main parachute of a dual-parachute system to be used for intentional parachute jumping in connection with civil aircraft of Jordan unless that person:

- (1) Has an appropriate current certificate issued under this subpart;
- (2) Is under the supervision of a current certificated parachute rigger;
- (3) Is the person making the next parachute jump with that parachute in accordance with 105.43(a) of the JCAR; or
- (4) Is the parachutist in command making the next parachute jump with that parachute in a tandem parachute operation conducted under 105.45(b)(1) of the JCAR.

(c) Each person who holds a parachute rigger certificate shall present it for inspection upon the request of the Chief Commissioner/CEO or of any law enforcement officer.

(d) The following parachute rigger certificates are issued under this part:

- (1) Senior parachute rigger.
- (2) Master parachute rigger.

(e) Sections 65.127 through 65.133 do not apply to parachutes packed, maintained, or altered for the use of the Jordanian Air Force.

65.113 Eligibility requirements: General.

(a) To be eligible for a parachute rigger certificate, a person must:

- (1) Be at least 20 years of age;
- (2) Be able to read, write, speak, and understand the English language.
- (3) Comply with the sections of this subpart that apply to the certificate and type rating he seeks; and
- (4) Hold at least a third – class medical certificate issued under part 67 of JCAR within the 12 months before the application is made.

65.115 Senior parachute rigger certificate: Experience, knowledge, and skill requirements.

Except as provided in 65.117, an applicant for a senior parachute rigger certificate must:

(a) Present evidence satisfactory to the Chief Commissioner/CEO that he has packed at least 20 parachutes of each type for which he seeks a rating, in accordance with the manufacturer's instructions and under the supervision of a certificated parachute rigger holding a rating for that type or a person holding an appropriate military rating;

(b) Pass a written test, with respect to parachutes in common use, on:

- (1) Their construction, packing, and maintenance;
- (2) The manufacturer's instructions;
- (3) The regulations of this subpart; and

(c) Pass an oral and practical test showing his ability to pack and maintain at least one type of parachute in common use, appropriate to the type rating he seeks.

65.117 Military riggers or former military riggers: Special certification rule.

(a) Is serving as a member or civilian employee, or has served within the 12 months before he applies, as a parachute rigger for a regular Armed Forces of a foreign country;

(b) Is serving, or has served within the 12 months before he applies, as a parachute rigger for the Jordanian Armed Forces; and

65.119 Master parachute rigger certificate: Experience, knowledge, and skill requirements.

An applicant for a master parachute rigger certificate must meet the following requirements:

(a) Present evidence satisfactory to the Chief Commissioner/CEO that he has had at least 3 years of experience as a parachute rigger and has satisfactorily packed at least 100 parachutes of each of two types in common use, in accordance with the manufacturer's instructions:

- (1) While a certificated and appropriately rated senior parachute rigger; or
- (2) While under the supervision of a certificated and appropriately rated parachute rigger or a person holding appropriate military ratings.
- (3) An applicant may combine experience specified in paragraphs (a) (1) and (2) of this section to meet the requirements of this paragraph.

(b) If the applicant is not the holder of a senior parachute rigger certificate, pass a written test, with respect to parachutes in common use, on:

- (1) Their construction, packing, and maintenance;
- (2) The manufacturer's instructions; and
- (3) The regulations of this subpart.

(c) Pass an oral and practical test showing his ability to pack and maintain two types of parachutes in common use, appropriate to the type ratings he seeks.

65.121 Type ratings.

(a) The following type ratings are issued under this subpart:

- (1) Seat.
- (2) Back.
- (3) Chest.
- (4) Lap.

(b) The holder of a senior parachute rigger certificate who qualifies for a master parachute rigger certificate is entitled to have placed on his master parachute rigger certificate the ratings that were on his senior parachute rigger certificate.

65.123 Additional type ratings: Requirements.

A certificated parachute rigger who applies for an additional type rating must:

- (a) Present evidence satisfactory to the Chief Commissioner/CEO that he has packed at least 20 parachutes of the type for which he seeks a rating, in accordance with the manufacturer's instructions and under the supervision of a certificated parachute rigger holding a rating for that type or a person holding an appropriate military rating; and
- (b) Pass a practical test, to the satisfaction of the Chief Commissioner/CEO, showing his ability to pack and maintain the type of parachute for which he seeks a rating.

65.125 Certificates: Privileges.

(a) A certificated senior parachute rigger may:

- (1) Pack or maintain (except for major repair) any type of parachute for which he is rated; and
- (2) Supervise other persons in packing any type of parachute for which that person is rated in accordance with 105.43(a) or 105.45(b)(1) of the JCAR.

(b) A certificated master parachute rigger may:

- (1) Pack, maintain, or alter any type of parachute for which he is rated; and
- (2) Supervise other persons in packing, maintaining, or altering any type of parachute for which the certificated parachute rigger is rated in accordance with 105.43(a) or 105.45(b)(1) of the JCAR.

(c) A certificated parachute rigger need not comply with 65.127 through 65.133 (relating to facilities, equipment, performance standards, records, recent experience, and seal) in packing, maintaining, or altering (if authorized) the main parachute of a dual parachute pack to be used for intentional jumping.

65.127 Facilities and equipment.

No certificated parachute rigger may exercise the privileges of his certificate unless he has at least the following facilities and equipment available to him:

- (a) A smooth top table at least three feet (0.9 meters) wide by 40 feet (12meters) long.

- (b) Suitable housing that is adequately heated, lighted, and ventilated for drying and airing parachutes.
- (c) Enough packing tools and other equipment to pack and maintain the types of parachutes that he services.
- (d) Adequate housing facilities to perform his duties and to protect his tools and equipment.

65.129 Performance standards.

No certificated parachute rigger may:

- (a) Pack, maintain, or alter any parachute unless he is rated for that type;
- (b) Pack a parachute that is not safe for emergency use;
- (c) Pack a parachute that has not been thoroughly dried and aired;
- (d) Alter a parachute in a manner that is not specifically authorized by the Chief Commissioner/CEO or the manufacturer;
- (e) Pack, maintain, or alter a parachute in any manner that deviates from procedures approved by the Chief Commissioner/CEO or the manufacturer of the parachute; or
- (f) Exercise the privileges of his certificate and type rating unless he understands the current manufacturer's instructions for the operation involved and has:
 - (1) Performed duties under his certificate for at least 90 days within the preceding 12 months; or
 - (2) Shown the Chief Commissioner/CEO that he is able to perform those duties.

65.131 Records.

- (a) Each certificated parachute rigger shall keep a record of the packing, maintenance, and alteration of parachutes performed or supervised by him. He shall keep in that record, with respect to each parachute worked on, a statement of:
 - (1) Its type and make;
 - (2) Its serial number;

- (3) The name and address of its owner;
- (4) The kind and extent of the work performed;
- (5) The date when and place where the work was performed; and
- (6) The results of any drop tests made with it.

(b) Each person who makes a record under paragraph (a) of this section shall keep it for at least 2 years after the date it is made.

(c) Each certificated parachute rigger who packs a parachute shall write, on the parachute packing record attached to the parachute, the date and place of the packing and a notation of any defects he finds on inspection. He shall sign that record with his name and the number of his certificate.

65.133 Seal.

Each certificated parachute rigger must have a seal with an identifying mark prescribed by the Chief Commissioner/CEO, and a seal press. After packing a parachute he shall seal the pack with his seal in accordance with the manufacturer's recommendation for that type of parachute.

SUBPART-G

Airport Operations And Maintenance Competency Certificate

65.141 Eligibility requirements: General

(a) To be eligible for a competency certificate a person must:

- (1) Be at least 18 years of age.
- (2) Be specially qualified to perform operational and/or maintenance functions at certificated airports under part 139 of JCAR or components thereof, appropriate to the job for which he is employed;
- (3) Be employed for specific job requiring those special qualifications by a certified airport operator or by any other related agencies, that is required by the airport operating certificate or approved operations specifications to provide a continuous safety operation and maintenance program according to the airport certification manual;
- (4) Be recommended for certification by his employer;

(5) Pass the required general knowledge test through demonstration of skills, to the satisfaction of the Chief Commissioner/CEO, as able to satisfactorily operate and or maintain airport or components, appropriate to the job for which he is employed.

(6) Have either:

(i) At least 24 months of practical experience in the procedures, practices, inspection methods, material, tools machine tools, and equipment generally used in the maintenance duties of the specific job for which the person is to be employed and certificated; or

(ii) Completed formal training that is acceptable to the Chief Commissioner/CEO and is specially designated to qualify the applicant for the job on which the applicant is to be employed;

(7) Be able to read, write, speak, and understand the English language; and

(8) Holds at least a third-class medical certificate issued under part 67 of JCAR within the 12 months before the date application is made.

(b) This subpart dose not apply to the issuance of airport competency certificates at airports which its operations are conducted only by reason of the airport being designated as an alternate airport.

65.143 Ratings.

An applicant who meets the requirements of this subpart is entitled to be issued an Airport competency certificate with the following ratings:

(a) Airfield Maintenance;

The following type ratings are issued under this paragraph:

(1) Pavement maintenance.

(2) Lighting maintenance.

(3) Markings maintenance.

(b) Airport Operations;

The following type ratings are issued under this paragraph:

(1) Ground Operations.

(2) Civil Defense Operations.

(3) Hazardous materials Handling.

(4) Airport Environment.

65.145 Airport Competency Certificate: Privileges and Limitations.

(a) An airport competency certificated holder may perform or supervise the operations and/or maintenance, preventive maintenance or alteration of airport components appropriate to the job for which the certificate holder was employed and certificated, but only in connection with duties for the airport certificate holder or the other related agency by whom the airport competency certificate holder was employed and recommended.

(b) An airport competency certificate holder may not perform or supervise duties under this subpart unless he understands the related current instructions of the airport certificate holder or any other related agency by whom the airport competency certificate holder is employed in addition to the manufacturer's instructions for the operations involved.

65.147 Display of certificate.

Each person who holds an airport competency certificate shall keep it within the immediate area where he normally exercises the privileges of the certificate and shall present it for inspection upon the request of Chief Commissioner/CEO or local law enforcement officer.

SUBPART-H

Air Navigation Maintenance Competency Certificate

65.151 Eligibility requirements: General

To be eligible for air navigation competency certificate a person must:

(1) Be at least 18 years of age.

(2) Be specially qualified to perform operational and /or maintenance functions at air navigation facilities or components thereof, appropriate to the job for which he is employed;

(3) Be employed for specific job requiring those special qualifications by air navigation operator or by any other related agencies, that is required to provide a continuous safety operation and maintenance program according to the manufacturer manual;

(4) Be recommended for certification by his employer;

(5) Pass the required general knowledge test through written, oral or practical demonstration of skills, to the satisfaction of the Chief Commissioner/CEO, as able to satisfactorily operate and or maintain air navigation system or component, appropriate to the job for which he is employed.

(6) Have either:

(i) At least 18 months of practical experience in the procedures, practices, inspection methods, material, tools machine tools, and equipment generally used in the maintenance duties of the specific job for which the person is to be employed and certificated; or

(ii) Completed formal training that is acceptable to the Chief Commissioner/CEO and is specially designated to qualify the applicant for the job on which the applicant is to be employed;

(7) Be able to read, write, speak, and understand the English language; and

(8) Holds at least a third-class medical certificate issued under part 67 of JCAR within the 12 months before the date application is made.

65.153 Ratings.

An applicant who meets the requirements of this subpart is entitled to be issued an Air Navigation Competency Certificate with the following ratings:

(a) Radar Maintenance.

(b) DVOR/VOR/DME Maintenance.

(c) ILS Maintenance.

(d) The Communication System Maintenance.

65.155 Air Navigation Competency Certificate: Privileges and Limitations.

(a) An air navigation competency certificated holder may perform or supervise the operations and/or maintenance, preventive maintenance or alteration of air navigation components appropriate to the job for which the certificate holder was employed and certificated.

(b) An air navigation competency certificate holder may not perform or supervise duties under this subpart unless he understands the related current instructions of the air navigation system operator by whom the air navigation competency certificate holder is employed in addition to the manufacturer's instructions for the operations involved.

65.157 Display of certificate.

Each person who holds an air navigation competency certificate shall keep it within the immediate area where he normally exercises the privileges of the certificate and shall present it for inspection upon the request of the Chief Commissioner/CEO or law enforcement officer.

Subpart-I

Validation of aircraft maintenance licenses in accordance with ICAO Annex 1

65.159 General.

Based on the provisions of paragraph 1.2.2 of Annex 1 which states" When a Contracting State renders valid a licence issued by another Contracting State, as an alternative to the issuance of its own licence, it shall establish validity by suitable authorization to be carried with the former licence accepting it as the equivalent of the latter. The validity of the authorization shall not extend beyond the period of validity of the licence".

License validations are issued to the holder of an aviation document which has been issued by an ICAO State or by any other state which is in compliance with ICAO Annex 1. The license must be appropriately endorsed for the type and class of aircraft to be operated. A current medical certificate must also be submitted along with a completed License Validation application form in a manner accepted to CARC.

- (a) The holder's license will only be valid for exercising its privileges on Jordanian registered aircraft, within the validity period of the license, when accompanied with validation provided by the CARC.
- (b) The validation shall be granted for a maximum period of six months.
- (c) The validation is contingent upon the continued validity of the license submitted.
- (d) This validation may contain certain limitations to the privileges listed on the holder's license.
- (e) A compliance process with the Jordanian knowledge and experience requirements for the validation may be initiated. Any non-compliance should either lead to refuse a validation or to limit the privileges.
- (f) A limitation on the validation may contain the restriction to sign for the release to service of the aircraft, while allowing the license holder to sign off individual tasks.

65.161 Eligibility requirements.

- (a) Be at least a 28 years of age.
- (b) A Certificate of Validation will not be issued where a person holding an ICAO Contracting State license is seeking regular employment. In such cases the applicant shall apply for a mechanic or repairman certificate in accordance with Part 65.71(d) of Subpart D and Part 65.101(b) of Subpart E as appropriate.
- (c) Before a license is validated, it must have the aircraft type(s) for which the validation is required, specified in the Aircraft Rating.
- (d) Applications for a Certificate of Validation may be accepted when submitted by the Jordanian operating company on behalf of the holder.
- (e) Proof of identity – Actual passport or actual or authenticated Birth Certificate. A photocopy will be acceptable provided all the relevant information is clearly presented and the copy is certified by the Jordanian operating company.
- (f) Letter of Verification from the issuing Authority to confirm license issued in full compliance with ICAO Annex 1, applicants name, date of birth, license held, ratings held on license, currency and validity of license.
- (g) Valid Jordanian third- class medical certificate issued under JCAR Part 67.
- (h) Holds Jordanian work permit issued in accordance with the provisions of Ministry of Labor.
- (i) The applicant shall be in compliance with the provision of Part 65.14
- (j) Current Continuation Training.

**Subpart-I
Reserved**

- END-

Appendix- A Curriculum Requirements

This appendix defines terms used in appendices B, C, and D of this part, and describes the levels of proficiency at which items under each subject in each curriculum must be taught, as outlined in appendices B, C, and D.

(a) Definitions. As used in appendices B, C, and D:

- (1) Inspect means to examine by sight and touch.
- (2) Check means to verify proper operation.
- (3) Troubleshoot means to analyze and identify malfunctions.
- (4) Service means to perform functions that assure continued operation.
- (5) Repair means to correct a defective condition. Repair of an airframe or powerplant system includes component replacement and adjustment, but not component repair.
- (6) Overhaul means to disassemble, inspect, repair as necessary, and check.

(b) Teaching levels.

- (1) Level 1 requires:
 - (i) Knowledge of general principles, but no practical application.
 - (ii) No development of manipulative skill.
 - (iii) Instruction by lecture, demonstration, and discussion.
- (2) Level 2 requires:
 - (i) Knowledge of general principles, and limited practical application.
 - (ii) Development of sufficient manipulative skill to perform basic operations.
- (3) Level 3 requires:
 - (i) Knowledge of general principles, and performance of a high degree of practical application.
 - (ii) Development of sufficient manipulative skill to accomplish return to service.
 - (iii) Instruction by lecture, demonstration, discussion, and a high degree of practical application.

Appendix - B General Curriculum Subjects

This appendix lists the subjects required in at least 400 hours in general curriculum subjects.

The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

a. basic electricity

- 1.(2)

Calculate and measure capacitance and inductance.

2.(2)

Calculate and measure electrical power.

3.(3)

Measure voltage, current, resistance, and continuity.

4. (3)

Determine the relationship of voltage, current, and resistance in electrical circuits.

5. (3)

Read and interpret aircraft electrical circuit diagrams, including solid state devices and logic functions.

6.(3)

Inspect and service batteries.

b. aircraft drawings

7.(2)

Use aircraft drawings, symbols, and system schematics.

8.(3)

Draw sketches of repairs and alterations.

9.(3)

Use blueprint information.

10.(3)

Use graphs and charts.

c. weight and balance

11. (2)

Weigh aircraft.

12. (3)

Perform complete weight -
and

- balance check and record data.

d. fluid lines and fittings

13.(3)

Fabricate and install rigid and flexible fluid lines and fittings.

e. materials and processes

14.(1)

Identify and select appropriate nondestructive testing methods.

15. (2)

Perform penetrant, eddy current, ultrasonic, and magnetic particle inspections.

16.(1)

Perform basic heat-treating processes.

17.(3)

Identify and select aircraft hardware and materials.

18.(3)

Inspect and check welds.

19.(3)

Perform precision measurements.

f. ground operation and servicing

20. (2)

Start, ground operate, move, service, and secure aircraft and identify typical ground operation hazards.

21.(2)

Identify and select fuels.

g. cleaning and corrosion control

22.(3)

Identify and select cleaning materials.

23. (3)

Inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning.

h. mathematics

24.(3)

Extract roots and raise numbers to a given power.

25. (3)

Determine areas and volumes of various geometrical shapes.

26.(3)

Solve ratio, proportion, and percentage problems.

27. (3)

Perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers.

i. maintenance forms and records

28.(3)

Write descriptions of work performed including aircraft discrepancies and corrective actions using typical aircraft maintenance records.

29.(3)

Complete required maintenance forms, records, and inspection reports.

j. basic physics

30.(2)

Use and understand the principles of simple machines, sound, fluid, and heat dynamics, basic aerodynamics, aircraft structures, and theory of flight.

k. maintenance publications

31.(3)

Demonstrate ability to read, comprehend, and apply information contained in approved manufacturers' aircraft maintenance specifications, data sheets, manuals, publications, and related Airworthiness Directives, and Advisory material.

32.(3)

Read technical data.

1. mechanic privileges and limitations

33.(3)

Exercise mechanic privileges within the limitations prescribed by part 65 of JCAR.

34 (3)

Understand the CARC relevant Aircraft Mechanic License Publications.

Appendix - C

Airframe Curriculum Subjects

This appendix lists the subjects required in at least 750 hours of each airframe curriculum, in addition to at least 400 hours in general curriculum subjects. The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

I. Airframe Structures

a. wood structures

1.(1)

Service and repair wood structures.

2.(1)

Identify wood defects.

3.(1)

Inspect wood structures.

b. aircraft covering

4.(1)

Select and apply fabric and fiberglass covering materials.

5.(1)

Inspect, test, and repair fabric and fiberglass.

c. aircraft finishes

6.(1)

Apply trim, letters, and touchup paint.

7.(2)

Identify and select aircraft finishing materials.

8.(2)

Apply finishing materials.

9.(2)

Inspect finishes and identify defects.

d. sheet metal and non-metallic structures

10. (2)

Select, install, and remove special fasteners for metallic, bonded, and composite structures.

11.(2)

Inspect bonded structures.

12. (2)

Inspect, test, and repair fiberglass, plastics, honeycomb, composite, and laminated primary and secondary structures.

13. (2)

Inspect, check, service, and repair windows, doors, and interior furnishings.

14.(3)

Inspect and repair sheet-metal structures.

15.(3)

Install conventional rivets.

16.(3)

Form, lay out, and bend sheet metal.

e. welding

17.(1)

Weld magnesium and titanium.

18.(1)

Solder stainless steel.

19.(1)

Fabricate tubular structures.

20.(2)

Solder, braze, gas-weld, and arc-weld steel.

21.(1)

Weld aluminum and stainless steel.

f. assembly and rigging

22.(1)

Rig rotary-wing aircraft.

23.(2)

Rig fixed-wing aircraft.

24.(2)

Check alignment of structures.

25.(3)

Assemble aircraft components, including flight control surfaces.

26. (3)

Balance, rig, and inspect movable primary and secondary flight control surfaces.

27.(3)

Jack aircraft.

g. airframe inspection

28.(3)

Perform airframe conformity and airworthiness inspections.

II. Airframe Systems and Components

a. aircraft landing gear systems

29. (3)

Inspect, check, service, and repair landing gear, retraction systems, shock struts, brakes, wheels, tires, and steering systems.

b. hydraulic and pneumatic power systems

30.(2)

Repair hydraulic and pneumatic power systems components.

31.(3)

Identify and select hydraulic fluids.

32. (3)

Inspect, check, service, troubleshoot, and repair hydraulic and pneumatic power systems.

c. cabin atmosphere control systems

33. (1)

Inspect, check, troubleshoot, service, and repair heating, cooling, air conditioning, pressurization systems, and air cycle machines.

34.(2)

Inspect, check, troubleshoot, service and repair oxygen systems.

d. aircraft instrument systems

35. (1)

Inspect, check, service, troubleshoot, and repair electronic flight instrument systems and both mechanical and electrical heading, speed, altitude, temperature, pressure, and position indicating systems to include the use of built-in test equipment.

36.(2)

Install instruments and perform a static pressure system leak test.

e. communication and navigation systems

37. (1)

Inspect, check, and troubleshoot autopilot, servos and approach coupling systems.

38. (1)

Inspect, check, and service aircraft electronic communication and navigation systems, including VHF passenger address interphones and static discharge devices, aircraft VOR, ILS, LORAN, Radar beacon transponders, flight management computers, and GPWS.

39.(2)

Inspect and repair antenna and electronic equipment installations.

f. aircraft fuel systems

40.(1)

Check and service fuel dump systems.

41.(1)

Perform fuel management transfer, and defueling.

42.(1)

Inspect, check, and repair pressure fueling systems.

43.(2)

Repair aircraft fuel system components.

44.(2)

Inspect and repair fluid quantity indicating systems.

45. (2)

Troubleshoot, service, and repair fluid pressure and temperature

(3)

Inspect, check, service, troubleshoot, and repair aircraft fuel systems.

g. aircraft electrical systems

47.(2)

Repair and inspect aircraft electrical system components; crimp and splice wiring to manufacturers' specifications; and repair pins and sockets of aircraft connectors.

48. (3)

Install, check, and service airframe electrical wiring, controls, switches, indicators, and protective devices.

49.(3)

Inspect, check, troubleshoot, service, and repair alternating and direct current electrical systems.

50. (1)

Inspect, check, and troubleshoot constant speed and integrated speed drive generators.

h. position and warning systems

51. (2)

Inspect, check, and service speed and configuration warning systems, electrical brake controls, and anti-skid systems.

52.(3)

Inspect, check, troubleshoot, and service landing gear position indicating and warning systems.

i. ice and rain control systems

53. (2)

Inspect, check, troubleshoot, service, and repair airframe ice and rain control systems.

j. fire protection systems

54.(1)

Inspect, check, and service smoke and carbon monoxide detection systems.

55.(3)

Inspect, check, service, troubleshoot, and repair aircraft fire detection and extinguishing systems

Appendix - D
Powerplant Curriculum Subjects

This appendix lists the subjects required in at least 750 hours of each powerplant curriculum, in addition to at least 400 hours in general curriculum

subjects. The number in parentheses before each item listed under each subject heading indicates the level of proficiency at which that item must be taught.

I. Powerplant Theory and Maintenance

a. reciprocating engines

1.(1)

Inspect and repair a radial engine.

2.(2)

Overhaul reciprocating engine.

3.(3)

Inspect, check, service, and repair reciprocating engines and engine installations.

4.(3)

Install, troubleshoot, and remove reciprocating engines.

b. turbine engines

5.(2)

Overhaul turbine engine.

6. (3)

Inspect, check, service, and repair turbine engines and turbine engine installations.

7.(3)

Install, troubleshoot, and remove turbine engines.

c. engine inspection

8.(3)

Perform powerplant conformity and airworthiness inspections.

II. Powerplant Systems and Components

a. engine instrument systems

9. (2)

Troubleshoot, service, and repair electrical and mechanical fluid rate-of-flow indicating systems.

10.(3)

Inspect, check, service, troubleshoot, and repair electrical and mechanical engine temperature, pressure, and r.p.m. indicating systems.

b. engine fire protection systems

11. (3)

Inspect, check, service, troubleshoot, and repair engine fire detection and extinguishing systems.

c. engine electrical systems .

12.(2)

Repair engine electrical system components.

13.(3)

Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices.

d. lubrication systems

14.(2)

Identify and select lubricants.

15.(2)

Repair engine lubrication system components.

16.(3)

Inspect, check, service, troubleshoot, and repair engine lubrication systems.

e. ignition and starting systems

17.(2)

Overhaul magneto and ignition harness.

18. (2)

Inspect, service, troubleshoot, and repair reciprocating and turbine engine ignition systems and components.

19.a.(3)

Inspect, service, troubleshoot, and repair turbine engine electrical starting systems.

19.b.(1)

Inspect, service, and troubleshoot turbine engine pneumatic starting systems.

f. fuel metering systems

20.(1)

Troubleshoot and adjust turbine engine fuel metering systems and electronic engine fuel controls.

21.(2)

Overhaul carburetor.

22.(2)

Repair engine fuel metering system components.

23. (3)

Inspect, check, service, troubleshoot, and repair reciprocating and turbine engine fuel metering systems.

g. engine fuel systems

24.(2)

Repair engine fuel system components.

25.(3)

Inspect, check, service, troubleshoot, and repair engine fuel systems.

h. induction and engine airflow systems

26.(2)

Inspect, check, troubleshoot, service, and repair engine ice and rain control systems.

27.(1)

Inspect, check, service, troubleshoot and repair heat exchangers, superchargers, and turbine engine airflow

and temperature control systems.

28.(3)

Inspect, check, service, and repair carburetor air intake and induction manifolds.

i. engine cooling systems

29.(2)

Repair engine cooling system components.

30. (3)

Inspect, check, troubleshoot, service, and repair engine cooling systems.

j. engine exhaust and reverser systems

31.(2)

Repair engine exhaust system components.

32.a.(3)

Inspect, check, troubleshoot, service, and repair engine exhaust systems.

32.b.(1)

Troubleshoot and repair engine thrust reverser systems and related components.

k. propellers

33.(1)

Inspect, check, service, and repair propeller synchronizing and ice control systems.

34.(2)

Identify and select propeller lubricants.

35.(1)

Balance propellers.

36.(2)

Repair propeller control system components.

37.(3)

Inspect, check, service, and repair fixed-pitch, constant-speed, and feathering propellers, and propeller governing systems.

38.(3)

Install, troubleshoot, and remove propellers.

39.(3)

Repair aluminum alloy propeller blades.

l. unducted fans

40.(1)

Inspect and troubleshoot unducted fan systems and components.

m. auxiliary power units

41.(1)

Inspect, check, service, and troubleshoot turbine-driven auxiliary power units

APPENDIX- E

Aircraft Dispatcher Courses Overview

This appendix sets forth the areas of knowledge necessary to perform dispatcher functions. The items listed below indicate the minimum set of topics that must be covered in a training course for aircraft dispatcher certification. The order of coverage is at the discretion of the approved school.

I. Regulations

- A. Subpart C of this part;
- B. Parts 1, 61, 71, 91, OPS1, and 139 of the JCAR.
- C. General Operating Manual.

II. Meteorology

A. Basic Weather Studies:

- (1) The earth's motion and its effects on weather.
- (2) Analysis of the following regional weather types, characteristics, and structures, or combinations thereof:
 - (a) Maritime.
 - (b) Continental.
 - (c) Polar.
 - (d) Tropical.
- (3) Analysis of the following local weather types, characteristics, and structures or combinations thereof:
 - (a) Coastal.
 - (b) Mountainous.
 - (c) Island.
 - (d) Plains.
- (4) The following characteristics of the atmosphere:
 - (a) Layers.
 - (b) Composition.
 - (c) Global Wind Patterns.
 - (d) Ozone.
- (5) Pressure:
 - (a) Units of Measure.
 - (b) Weather Systems Characteristics.
 - (c) Temperature Effects on Pressure.
 - (d) Altimeters.
 - (e) Pressure Gradient Force.

- (f) Pressure Pattern Flying Weather.
- (6) Wind:
 - (a) Major Wind Systems and Coriolis Force.
 - (b) Jetstreams and their Characteristics.
 - (c) Local Wind and Related Terms.
- (7) States of Matter:
 - (a) Solids, Liquid, and Gases.
 - (b) Causes of change of state.
- (8) Clouds:
 - (a) Composition, Formation, and Dissipation.
 - (b) Types and Associated Precipitation.
 - (c) Use of Cloud Knowledge in Forecasting.
- (9) Fog:
 - (a) Causes, Formation, and Dissipation.
 - (b) Types.
- (10) Ice:
 - (a) Causes, Formation, and Dissipation.
 - (b) Types.
- (11) Stability/Instability:
 - (a) Temperature Lapse Rate, Convection.
 - (b) Adiabatic Processes.
 - (c) Lifting Processes.
 - (d) Divergence.
 - (e) Convergence.
- (12) Turbulence:
 - (a) Jetstream Associated.
 - (b) Pressure Pattern Recognition.
 - (c) Low Level Windshear.
 - (d) Mountain Waves.
 - (e) Thunderstorms.
 - (f) Clear Air Turbulence.
- (13) Airmasses:
 - (a) Classification and Characteristics.
 - (b) Source Regions.
 - (c) Use of Airmass Knowledge in Forecasting.
- (14) Fronts:
 - (a) Structure and Characteristics, Both Vertical and Horizontal.
 - (b) Frontal Types.
 - (c) Frontal Weather Flying.
- (15) Theory of Storm Systems:
 - (a) Thunderstorms.
 - (b) Tornadoes.
 - (c) Hurricanes and Typhoons.
 - (d) Microbursts.

(e) Causes, Formation, and Dissipation.

B. Weather, Analysis, and Forecasts

(1) Observations:

(a) Surface Observations.

(i) Observations made by certified weather observer.

(ii) Automated Weather Observations.

(b) Terminal Forecasts.

(c) Significant En route Reports and Forecasts.

(i) Pilot Reports.

(ii) Area Forecasts.

(iii) Sigmets, Airmets.

(iv) Center Weather Advisories.

(d) Weather Imagery.

(i) Surface Analysis.

(ii) Weather Depiction.

(iii) Significant Weather Prognosis.

(iv) Winds and Temperature Aloft.

(v) Tropopause Chart.

(vi) Composite Moisture Stability Chart.

(vii) Surface Weather Prognostic Chart.

(viii) Radar Meteorology.

(ix) Satellite Meteorology.

(x) Other charts as applicable.

(e) Meteorological Information Data Collection Systems.

(2) Data Collection, Analysis, and Forecast Facilities.

(3) Service Outlets Providing Aviation Weather Products.

C. Weather Related Aircraft Hazards.

(1) Crosswinds and Gusts.

(2) Contaminated Runways.

(3) Restrictions to Surface Visibility.

(4) Turbulence and Windshear.

(5) Icing.

(6) Thunderstorms and Microburst.

(7) Volcanic Ash.

III. Navigation.

A. Study of the Earth

(1) Time reference and location (0 Longitude, UTC).

- (2) Definitions.
- (3) Projections.
- (4) Charts.

B. Chart Reading, Application, and Use.

C. National Airspace Plan.

D. Navigation Systems.

E. Airborne Navigation Instruments.

F. Instrument Approach Procedures.

- (1) Transition Procedures.
- (2) Precision Approach Procedures.
- (3) Non-precision Approach Procedures.
- (4) Minimums and the relationship to weather.

G. Special Navigation and Operations.

- (1) North Atlantic.
- (2) Pacific.
- (3) Global Differences.

IV. AIRCRAFT

A. Aircraft Flight Manual.

B. Systems Overview.

- (1) Flight controls.
- (2) Hydraulics.
- (3) Electrical.
- (4) Air Conditioning and Pressurization.
- (5) Ice and Rain protection.
- (6) Avionics, Communication, and Navigation.
- (7) Powerplants and Auxiliary Power Units.

- (8) Emergency and Abnormal Procedures.
- (9) Fuel Systems and Sources.

C. Minimum Equipment List/Configuration Deviation List (MEL/CDL) and Applications.

D. Performance.

- (1) Aircraft in general.
- (2) Principles of flight:
 - (a) Group one aircraft.
 - (b) Group two aircraft.
- (3) Aircraft Limitations.
- (4) Weight and Balance.
- (5) Flight instrument errors.
- (6) Aircraft performance:
 - (a) Take-off performance.
 - (b) En route performance.
 - (c) Landing performance.

V. Communications

- A. Regulatory requirements.
- B. Communication Protocol.
- C. Voice and Data Communications.
- D. Notice to Airmen (NOTAMS).
- E. Aeronautical Publications.
- F. Abnormal Procedures.

VI. Air Traffic Control

- A. Responsibilities.
- B. Facilities and Equipment.
- C. Airspace classification and route structure.
- D. Flight Plans.
 - (1) Domestic.
 - (2) International.
- E. Separation Minimums.
- F. Priority Handling.
- G. Holding Procedures.

H. Traffic Management.

VII. Emergency and Abnormal Procedures

A. Security measures on the ground.

B. Security measures in the air.

C. CARC responsibility and services.

D. Collection and dissemination of information on overdue or missing aircraft.

E. Means of declaring an emergency.

F. Responsibility for declaring an emergency.

G. Required reporting of an emergency.

H. Aircraft Accident Investigation Unit (AAIU) reporting requirements.

VIII. Practical Dispatch Applications

A. Human Factors.

(1) Decision making:

(a) Situation Assessment.

(b) Generation and Evaluation of Alternatives.

(i) Tradeoffs and Prioritization.

(ii) Contingency Planning.

(c) Support Tools and Technologies.

(2) Human Error:

(a) Causes.

(i) Individual and Organizational Factors.

(ii) Technology-Induced Error.

(b) Prevention.

(c) Detection and Recovery.

(3) Teamwork:

(a) Communication and Information Exchange.

(b) Cooperative and Distributed Problem-Solving.

(c) Resource Management.

(i) Air Traffic Control (ATC) activities and workload.

(ii) Flightcrew activities and workload.

(iii) Maintenance activities and workload.

(iv) Operations Control Staff activities and workload.

B. Applied Dispatching.

- (1) Briefing techniques, Dispatcher, Pilot.
- (2) Preflight:
 - (a) Safety.
 - (b) Weather Analysis.
 - (i) Satellite imagery.
 - (ii) Upper and lower altitude charts.
 - (iii) Significant en route reports and forecasts.
 - (iv) Surface charts.
 - (v) Surface observations.
 - (vi) Terminal forecasts and orientation to Enhanced Weather Information System (EWINS).
 - (c) NOTAMS and airport conditions.
 - (d) Crew.
 - (i) Qualifications.
 - (ii) Limitations.
 - (e) Aircraft.
 - (i) Systems.
 - (ii) Navigation instruments and avionics systems.
 - (iii) Flight instruments.
 - (iv) Operations manuals and MEL/CDL.
 - (v) Performance and limitations.
 - (f) Flight Planning.
 - (i) Route of flight.
 - 1. Standard Instrument Departures and Standard Terminal Arrival Routes.
 - 2. En route charts.
 - 3. Operational altitude.
 - 4. Departure and arrival charts.
 - (ii) Minimum departure fuel.
 - 1. Climb.
 - 2. Cruise.
 - 3. Descent.
 - (g) Weight and balance.
 - (h) Economics of flight overview (Performance, Fuel Tankering).
 - (i) Decision to operate the flight.
 - (j) ATC flight plan filing.
 - (k) Flight documentation.
 - (i) Flight plan.
 - (ii) Dispatch release.
- (3) Authorize flight departure with concurrence of pilot in command.
- (4) In-flight operational control:

- (a) Current situational awareness.
 - (b) Information exchange.
 - (c) Amend original flight release as required.
- (5) Post-Flight:
- (a) Arrival verification.
 - (b) Weather debrief.
 - (c) Flight irregularity reports as required.