

**Notice of Proposed Rule Making
of JCAR Part 139**

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Jordan Civil Aviation Regulatory Commission (CARC) hereby releases a proposed reissue of JCAR Part 139 "Aerodrome Certification and Operations".

The objective of this NPRM is to announce the proposed issue and to seek concerned parties' comments and feedback regarding the above mentioned regulations and to facilitate enhanced public involvement in the rule making process.

CARC encourages comments concerning this proposal to be directed to the following email addresses:

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The closing date of comments: 02/01/2026



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Part 139

Aerodrome Certification and Operations

This part of Jordanian Civil Aviation Regulations is hereby issued under the authority and provisions of article 12-B of the Civil Aviation Law No. (41) dated 2007, as amended.

**Captain Daifallah Alfarajat
Chief Commissioner/CEO
Civil Aviation Regulatory Commission**

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Abbreviations and Symbols**(a) Abbreviations.**

ACR:	Aircraft classification Rating.
AFFF:	Aqueous film forming foam agent.
APAPI:	Abbreviated precision approach path indicator.
ARFF:	Aircraft Rescue and Firefighting.
APRX:	Approximately.
ASDA:	Accelerate-stop distance available.
ATS:	Air traffic services.
AT-VASIS:	Abbreviated T visual approach slope indicator system.
C:	Degree Celsius.
CARC:	Civil Aviation Regulatory Commission.
CBR:	California bearing ratio.
Cd:	Candela.
CIE:	International Commission on Illumination.
Cm:	Centimeter.
DME:	Distance measuring equipment.
DASS:	Directorate of Aerodrome Safety and Standards.
Ft:	Foot.
ILS:	Instrument landing system.
IMC:	Instrument meteorological conditions.
JCAR:	Jordan Civil Aviation Regulation.
K:	Degree Kelvin.
Kg:	Kilogram.
Km:	Kilometer.
km/h:	Kilometer per hour.
kt:	Knot.
L:	Liter.
LDA:	Landing distance available.
m:	Meter.
max:	Maximum.
MLS:	Microwave landing system.
mm:	Millimeter.
mm:	Minimum.
MN:	Mega newton.
MPa:	Mega Pascal.
NM:	Nautical mile.
NU:	Not usable.
OCA/H:	Obstacle clearance altitude/height.
OFZ:	Obstacle free zone.
OLS:	Obstacle limitation surface.
OMGWS:	Outer main gear wheel span
PAPI:	Precision approach path indicator.
PCR:	Pavement classification rating.

RESA: Runway end safety area.
RVR: Runway visual range.
TODA: Take-off distance available.
TORA: Take-off run available.
T-VASIS: T visual approach slope indicator system.
VMC: Visual meteorological conditions.
VOR: Very high frequency omnidirectional radio range.

(b) Symbols.

° Degree
= Equals
' Minute of arc
 μ Friction coefficient
> Greater than
< Less than
% Percentage
 $\pm$ Plus or minus

SUBPART (A)

GENERAL

139.1 Applicability.

This Part prescribes rules governing the certification and operation of land Aerodromes which are open for public civilian use operation of an air carrier that is conducted in the Hashemite Kingdom of Jordan.

139.3 Definitions.

The following are definitions of terms as used in this part:

Accuracy: a degree of conformance between the estimated or measured value and the true value.

For measured positional data, the accuracy is normally expressed in terms of a distance from a stated position within which there is a defined confidence of the true position falling.

Aerodrome: a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome beacon: aeronautical beacon used to indicate the location of an aerodrome from the air.

Aerodrome: an area of land or other hard surface, excluding water, that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.

Aerodrome operating certificate: a certificate issued by the Civil Aviation Regulatory Commission “CARC” under applicable regulations for the operation of an Aerodrome.

Apron: a defined area, on a land Aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fueling, parking or maintenance.

Balked landing: a landing maneuver that is unexpectedly discontinued at any point below the obstacle clearance altitude/height (OCA/H).

Certified Aerodrome: an aerodrome whose operator has been granted valid an Aerodrome certificate.

Clearway: a defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aero plane may make a portion of its initial climb to a specified height.

Human performance: human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Maneuvering area: that part of an Aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

Marker: an object displayed above ground level in order to indicate an obstacle or delineate a boundary.

Marking: a symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.

Movement area: that part of an Aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron(s).

Runway: a defined rectangular area on a land Aerodrome prepared for the landing and take-off of aircraft.

Runway visual range (RVR): the range over which the pilot of an aircraft on the centerline of a runway can see the runway surface markings or the lights delineating the runway or identifying its center line.

Safety management system (SMS): a systematic approach to managing safety including the necessary organizational structure, accountabilities, policies and procedures.

Shoulder: an area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.

Sign:

- (a) Fixed message sign: a sign presenting only one message.
- (b) Variable message sign: a sign capable of presenting several predetermined messages or no message, as applicable.

Slush: water-saturated snow which with a heel-and-toe slap-down motion against the ground will be displaced with a splatter; specific gravity: 0.5 up to 0.8.

Note: Combinations of ice, snow and/or standing water may, especially when rain, rain and snow, or snow is falling produce substances with specific gravities in excess of 0.8. These substances, due to their high water/ice content, will have a transparent rather than a cloudy appearance and, at the higher specific gravities, will be readily distinguishable from slush.

Snow (on the ground):

- (a) Dry snow: snow which can be blown if loose or, if compacted by hand, will fall apart again upon release; specific gravity: up to but not including 0.35.
- (b) Wet snow: snow which, if compacted by hand, will stick together and tend to or form a snowball; specific gravity: 0.35 up to but not including 0.5.
- (c) Compacted snow: snow which has been compressed into a solid mass that resists further compression and will hold together or break up into lumps if picked up; specific gravity: 0.5 and over.

Taxiway: a defined path on a land Aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the Aerodrome and another, including:

- (a) Aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only.
- (b) Apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi-route across the apron.
- (c) Rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times.

Threshold: the beginning of that portion of the runway usable for landing.

139.5 Purpose.

- (a) This Part represents the minimum requirements to achieve an acceptable level of safety.
- (b) Inspection Authority.
 - (1) Aerodrome Safety Inspectors are authorized to conduct safety oversight activities, including announced and unannounced inspections to ensure aviation safety and compliance with:
 - (i) The Civil Aviation Law No. 41 of 2007, as amended; and
 - (ii) The requirements of this Part.
 - (2) Aerodrome Safety Inspectors are empowered to address safety-critical findings and the related safety recommendations to ensure compliance with all relevant requirements prescribed in this Part.
- (c) Compliance.
 - (1) All Aerodrome operators shall comply with all requirements prescribed by subparts C and D of this part and JCAR Part 14 Aerodrome Design and Operations which contains specifications which are required by the CARC Chief Commissioner to meet design and operational requirements of Aerodromes.
 - (2) The Aerodrome operator shall comply with the regulations and publications mentioned in 139.3.7. The Aerodrome operator shall also comply with any conditions that may be endorsed in the Aerodrome Operating Certificate.
- (d) CARC Aerodrome Safety Inspector Authority.
 - (1) CARC Credentialed Aerodrome Safety Inspector are empowered to conduct safety oversight activities, including but not limited to:
 - (i) Inspect any part of any Aerodrome;
 - (ii) Investigate and test the effectiveness of Aerodrome practices and procedures;

- (iii) Require an Aerodrome operator, Aerodrome accountable manager or occupier of land outside the Aerodrome occupied for business purposes in connection with the Aerodrome to provide information deemed necessary to ensure the safety of the Aerodrome;
 - (iv) Enter any land or in any building, access to which is necessary, for the purpose of conducting safety oversight activities;
 - (v) Record an operation, procedure or installation in written, photographic or other electronic form; and
- (2) Aerodrome Safety Inspectors are also empowered to conduct safety oversight activities on air navigation installations.
- (3) Aerodrome Safety Inspectors are empowered to take into restricted zones of Aerodrome any equipment needed for them to perform their duties, including cameras, video recorders and tape recorders, and to use such equipment as necessary.

139.7 Applicable JCARS and other publication.

1. Applicable JCARS

- JCAR Part 139 Aerodrome Design, Operation and Certification
- JCAR Part 157 Notice of Construction, Alteration, Activation, and Deactivation of Aerodromes
- JCAR Part 150 Aerodrome Noise Compatibility Planning
- JCAR Part 77 Objects Affecting Navigable Airspace
- JCAR Part 301 Aviation Environmental Regulations
- JCAR Part 140 Ground Handling Services
- JCAR Part 19 Safety Management System

2. Other Publications

- Visual Aids for Navigation
- Runways Design
- Aerodrome Electrical Systems
- Land Use and Environmental Control
- Wildlife Control and Reduction
- Removal of Disabled Aircraft
- Control of Obstacles
- Aerodrome Operational Service
- Aerodrome Maintenance Service
- Safety Management System
- Airfield Pavement Surface Evaluation and Rating Manuals
- Aerodrome Certification Procedures
- Runway Incursions prevention program
- Pavement Operations
- Operational Safety on Aerodromes During Construction

- Aerodrome Safety Self-Inspection
- Aerodrome Ground Vehicle Operations / CARC Guide
- National Bird Strike Information System (IBIS)
- Overview of Safety Management System (Information Paper)
- IATA Safety Audit of Ground Operations (ISAGO)
- Rubber Removal Technique Information Paper
- Aerodrome Emergency Planning
- Apron Management Services
- Critical Data Related to Safety Occurrences Reported at Aerodromes for the Monitoring of Safety
- Pavement Surface Conditions
- Rescue and Firefighting Personnel and Training (Arabic Version)
- Rescue and Firefighting Personnel and Training (English Version)
- Rescue Operations in Difficult Environments
- Surface Movement Guidance and Control System

SUBPART (B)

CERTIFICATION

139.101 General Requirements.

(a) All Aerodromes open for international operations and public civilian use in the Hashemite Kingdom of Jordan shall be certified in accordance with the specifications contained in this Part as well as, JCARs Part 14, Part 150, Part 301, Part 19, part 140 and other related Jordan Civil Aviation Regulations and publications.

(b) As part of the certification process, CARC will ensure that an Aerodrome certification manual which will include all pertinent information on the Aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, is submitted by the applicant for approval/acceptance prior to granting the Aerodrome certificate.

139.103 Application for an Aerodrome Operating Certificate.

Each applicant for an Aerodrome Operating Certificate (AOC) shall submit an expression of interest and the relevant formal application as prescribed in Subpart C, including the following:

- (1) Two hard copies of an aerodrome certification manual (ACM) and one soft copy, as appropriate, prepared in accordance with subpart C of this part;
- (2) A payment of the appropriate application fee prescribed by related regulations;
- (3) Evidence of lawful entitlement to use the place as an Aerodrome;
- (4) A plan of the Aerodrome and its facilities certified by a registered surveyor; and
- (5) Possessing a third party insurance policy acceptable to the Chief Commissioner, or his designee.

139.105 Reserved.

139.107 Issuance of Certificate.

An applicant for an Aerodrome operating certificate is entitled to an Aerodrome operating certificate if:

- (1) The provisions of paragraph 139.103 of this part are met;
- (2) The applicant is properly and adequately equipped and able to provide a safe Aerodrome operating environment in accordance with:
 - (i) This part, and
 - (ii) Any limitations, which CARC finds necessary in the public interest.
- (3) The Chief Commissioner or his representatives, after inspection, finds that:

- (i) The applicant and Aerodrome staff have the necessary competence and experience to operate and maintain the Aerodrome properly;
 - (ii) The Aerodrome certification manual contains all relevant information;
 - (iii) The Aerodrome facilities, services and equipment are in accordance with the standard and practices specified in this part;
 - (iv) The Aerodrome operating procedures make satisfactory provision for the safety of aircraft; and
 - (v) An acceptable safety management system is in place at the Aerodrome.
- (4) CARC approved the Aerodrome certification manual;
- (5) The Aerodrome has, in effect, a CARC approved Airport security manual.
- (6) Aerodrome operating certificate applicant has established a quality management system and environmental management system in compliance with the related national regulations.

139.109 Duration of Certificate.

An Aerodrome operating certificate issued under this part is valid for two years unless surrendered by the operator, or if it is suspended, or revoked by CARC.

139.111 Exemptions, Limitations and Deviations.**(a) Exemptions.**

- (1) An Aerodrome operating certificate holder may petition the Chief Commissioner under JCAR Part 11 (General Rule Making), from any requirements of this Part if deemed necessary for the operation of Aerodrome providing that equivalent safety measure is ensured or;
- (2) The findings of the risk assessment indicate that the exiting level of risk is within the acceptable levels that established by CARC.
- (3) Each petition filed under this section shall be submitted in duplicate to the CARC in form and manner acceptable to the Chief Commissioner.
- (4) An exemption is subject to the Aerodrome operating certificate holder complying with conditions and procedures specified by the Chief Commissioner in the Aerodrome certificate as being necessary in the interest of safety.

(b) Deviations.

- (1) In emergency conditions requiring immediate action for the protection of life or property, involving the transportation of persons by air carriers, the Aerodrome operating certificate holder may deviate from any requirement of this part to the extent required to meet that emergency.
- (2) Each Aerodrome operating certificate holder who deviates from a requirement under paragraph (b)(1) of this section shall, as soon as practicable, but not

later than 14 days after the emergency, report in writing to the Chief Commissioner stating the nature, extent, and duration of the deviation.

- (3) Any other existing deviations in the Aerodrome facilities from the requirements of this part shall be pursued according to the requirements established under paragraph (a) of this section. Such deviations will be set out as an endorsement on the Aerodrome operating certificate.

(c) Limitations.

To serve public interest, and to ensure safe aircraft operation at any certified Aerodrome, the Chief Commissioner may impose an operational restriction as well as any limitation on the use of any Aerodrome facility.

139.113 – 139.115 Reserved.

139.117 Amendment of Certificate.

Provided that the requirements of 139.107 and 139.217 have been met, Chief Commissioner may amend an Aerodrome operating certificate when:

- (1) There is a change in the use or operation of the Aerodrome;
- (2) There is a change in the boundaries of the Aerodrome; or
- (3) There is a change in the physical characteristics of the Aerodrome; or
- (4) The holder of the Aerodrome operating certificate requests an amendment.
- (5) Any other change that is deemed necessary by CARC.

139.119 Surrender of an Aerodrome Operating Certificate.

(a) If the Aerodrome operating certificate holder decides not to renew the Aerodrome operating certificate, that operator shall give the Chief Commissioner, not less than 90 days, written notice of the date on which the certificate is to be surrendered in order that suitable promulgation action can be taken.

(b) CARC will cancel the certificate on the date specified in the notice.

139.121 Interim Aerodrome Operating Certificate.

(a) CARC Chief Commissioner may issue an interim Aerodrome operating certificate to an applicant, authorizing the applicant to operate an Aerodrome if the Chief Commissioner is satisfied that:

- (1) An Aerodrome operating certificate in respect of the Aerodrome will be issued to the applicant, or transferred to the transferee, as soon as the application procedure for the grant or transfer of an Aerodrome operating certificate has been completed; and
- (2) The grant of the interim certificate is in the public interest and is not jeopardizing aviation safety.

- (b) An interim Aerodrome operating certificate issued pursuant to section 139.121(a) and shall expire on:
 - (1) The date on which the Aerodrome operating certificate is issued; or
 - (2) The expiry date specified in the interim Aerodrome certificate, whichever is earlier.
- (c) Suspension and revocation of interim Aerodrome operating certificate will be in pursuant of sections 139.125 and 139.127 of this subpart.

139.123 Transfer of an Aerodrome Operating Certificate.

- (a) CARC Chief Commissioner may give its consent to and issue an instrument of transfer of an Aerodrome certificate to a transferee when:
 - (1) The current holder of the Aerodrome operating certificate notifies CARC in writing, at least 90 days before ceasing to operate the Aerodrome, that the current holder will cease to operate the Aerodrome as of the date specified in the notice;
 - (2) The current holder of the Aerodrome certificate notifies CARC in writing, of the name of the transferee;
 - (3) The transferee applies to CARC Chief Commissioner in writing, within 90 days before the current holder of the Aerodrome operating certificate ceases to operate the Aerodrome
 - (4) The requirements set out in regulation 139.107 are met by the transferee.
- (b) If CARC does not consent to the transfer of an Aerodrome operating certificate holder, it shall notify the current Aerodrome operating certificate holder and the transferee, in writing of its reasons no later than 7 days after making that decision.

139.125 Suspension of an Aerodrome Operating Certificate.

Suspension of an Aerodrome operating certificate may be considered if:

- (1) The established safety management system at the certified Aerodrome is found to be inadequate to maintain the acceptable level of safety;
- (2) It is in the interest of operational safety;
- (3) All other means for timely correction of the unsafe condition or ensuring safe aircraft operations have not yielded the required results;
- (4) The technical proficiency or qualifications of the Aerodrome key post holders as specified in Subpart D to perform the duties to meet the critical safety requirements in accordance with the regulations are found inadequate;
- (5) The Aerodrome operating certificate holder is incapable to take action to correct or mitigate the condition affecting aviation safety within a timeframe specified or approved by CARC; or

- (6) Aerodrome operating certificate holder wilfully fails to perform an already agreed upon corrective action and suspension of the certificate is the last resort to avoid unsafe operations of Aerodrome.

139.127 Revocation of an Aerodrome Operating Certificate.

An Aerodrome operating certificate may be revoked if:

- (1) The certificate holder is unwilling to carry out corrective action or has committed/repeated serious violations; or
- (2) The certificate holder has demonstrated a lack of responsibility, such as deliberate and flagrant acts of non-compliance or falsification of records jeopardizing aviation safety; or
- (3) It is convincingly clear that the continued operation of the Aerodrome will be detrimental to the public interest.

139.129 Renewal of the Aerodrome Operating Certificate.

- (a) An application for the renewal of Aerodrome operating certificate shall be made in a manner acceptable to the Chief Commissioner and within 60 days before the expiry of the certificate.
- (b) Renewal of the certificate shall be in accordance with the requirements prescribed in 139.107.

SUBPART (C)**AERODROME CERTIFICATION MANUAL (ACM)****139.201 General Requirements.**

(a) An applicant for an Aerodrome operating certificate shall prepare, and submit with an application, two hard copies and one soft copy of the Aerodrome certification manual for approval by the Chief Commissioner. Only those items addressing subjects required for certification under this Part shall be included in the Aerodrome certification manual.

(b) Each Aerodrome operating certificate holder shall comply with an approved Aerodrome Certification Manual that meets the requirements of sections 139.203 and 139.205.

139.203 Preparation of Aerodrome Certification Manual (ACM).

The Aerodrome Certification Manual required by this Part shall:

- (1) Be typewritten and signed by the Aerodrome operator;
- (2) Be in a form that is easy to revise;
- (3) Have the effective date and issuance status (original/ amendment number on each page);
- (4) Have an approval sheet showing issue number, amendment number and its effective date;
- (5) Be organized in a manner helpful to the preparation, review, and approval processes; and
- (6) Have a distribution list against signature internally and externally.

139.205 Contents of Aerodrome Certification Manual (ACM).

The contents of the Aerodrome Certification Manual are prescribed in **Appendix (1)** of this part and shall include, but are not limited to, the following parts as applicable:

Part 1: General Information.

Part 2: Particulars of the Aerodrome Site.

Part 3: Particulars of the Aerodrome Required to be Reported to the Aeronautical Information Services (AIS).

Part 4: Particulars of the Aerodrome Operating Procedures Measures.

Part 5: Rescue and Firefighting Requirements.

Part 6: Aerodrome Administration and Safety Management System in accordance with JCAR 19.

139.207 Maintenance of Aerodrome Certification Manual (ACM).

Each Aerodrome operating certificate holder shall:

- (1) Keep the ACM current at all times;
- (2) Maintain a complete copy of the approved ACM at the Aerodrome;
- (3) Furnish a copy of the applicable portions of the approved ACM to the Aerodrome personnel responsible for their implementation against signature;
- (4) Provide the Chief Commissioner with two complete and current copies of the ACM.
- (5) Make the copy required by paragraph (b) of this section available for inspection by the Chief Commissioner upon request;
- (6) Appoint the safety post holder to be responsible for the maintenance of the ACM.

139.209 Location of the Aerodrome Certification Manual (ACM).

Each Aerodrome operating certificate holder shall:

- (1) Provide CARC with a complete and current copy of the Aerodrome certification manual.
- (2) Keep at least one complete and current copy of the Aerodrome certification manual at the Aerodrome and one copy at the operator's principle place of the business if other than the Aerodrome.
- (3) Make the copy available for the inspection by authorized CARC inspectors.
- (4) Distribute a complete and current copy to all stakeholders.

139.211 - 139.215 Reserved.**139.217 Amendment of Aerodrome Certification Manual (ACM).**

(a) The amendment of the approved ACM may be initiated either by:

- (1) The Aerodrome operating certificate holder; or
- (2) The CARC Chief Commissioner; when it is determined that the aviation safety and the public interest require the amendment.

(b) An applicant for ACM amendment shall notify CARC Chief Commissioner at least 30 days before the proposed effective date of the amendment, and obtain CARC approval before publishing any changes to the ACM, unless a shorter period of the notification is allowed by the Chief Commissioner for the interest of safety operation.

(c) At any time within 30 days after receiving a notice of refusal to approve the application for amendment, the Aerodrome operating certificate holder may petition the Chief Commissioner to reconsider the refusal to amend.

(d) In the case of amendments initiated by the Chief Commissioner, CARC will notify the Aerodrome operating certificate holder of the proposed amendment, in writing, fixing a reasonable period (but not less than 7 days) within which the Aerodrome operator certificate holder may submit written information, views, and arguments on the amendment. After considering all relevant material presented, the Chief Commissioner notifies the Aerodrome operating certificate holder of any amendment adopted or rescinds the notice. The amendment becomes effective not less than 30 days after the Aerodrome operating certificate holder receives notice of it, except that prior to the effective date the Aerodrome operating certificate holder may petition the Chief Commissioner to reconsider the amendment, in which case its effective date is delayed pending a decision by the Chief Commissioner.

(e) Notwithstanding the provisions of paragraph (d) of this section, if the Chief Commissioner finds that there is an emergency requiring immediate action with respect to aviation safety, the Chief Commissioner may issue an amendment, effective without delay on the date the Aerodrome operating certificate holder receives notice of it. In such a case, the Chief Commissioner incorporates the finding of the emergency, and a brief statement of the reasons for the finding, in the notice of the amendment, and the Aerodrome operating certificate holder shall immediately amend the ACM and distribute the amendment. Within 30 days after the issuance of such an emergency amendment, the Aerodrome operating certificate holder may petition the Chief Commissioner to reconsider either the finding of an emergency or the amendment itself or both. This petition does not automatically delay the effective date of the emergency amendment.

SUBPART (D)

OPERATIONS

139.301 Paved Areas.

(a) Each Aerodrome operator shall employ a maintenance program, including preventive maintenance where appropriate, to maintain the Aerodrome facilities in a condition that does not impair the safety of aircraft operation, and promptly repair the pavement of, each runway, taxiway, loading ramp, and parking area on the Aerodrome which is available for air carrier use as follows:

- (1) The surface of the shoulder that abuts the runway shall be flush with the surface of the runway and its transverse slope shall not exceed 2.5 per cent.
- (2) The pavement shall have no hole exceeding 7.5 cm in depth nor any hole the slope of which from any point in the hole to the nearest point at the lip of the hole is 45 degrees or greater as measured from the pavement surface plane, unless, in either case, the entire area of the hole can be covered by a 12.5 cm diameter circle.
- (3) The pavement shall be free of cracks and surface variations which could impair directional control of air carrier aircraft.
- (4) Except as provided in paragraph (b) of this section, mud, dirt, and loose aggregate, debris, foreign objects, rubber deposits and other contaminants shall be removed promptly and as completely as practicable.
- (5) Except as provided in paragraph (b) of this section, any chemical solvent that is used to clean any pavement area shall be removed as soon as practically possible, consistent with the instructions of the manufacturer of the solvent.
- (6) The pavement shall be sufficiently drained and free of depressions to prevent ponding that obscures markings or impairs safe aircraft operations.

Note: Specification of paved areas maintenance is given in JCAR Part 14, Chapter (10) and CARC related guidance material.

(b) Paragraphs (a)(4) and (a)(5) of this section do not apply to snow and ice accumulations and their control, including the associated use of materials such as sand and deicing solutions.

139.303 Safety Areas.

Each Aerodrome operator shall maintain its safety areas as follows:

- (a) Each safety area shall be cleared and graded, and have no potentially hazardous ruts, humps, depressions, or other surface variations.
- (b) Each safety area shall be drained by grading or storm sewers to prevent water accumulation and ponding.

(c) Each safety area shall be capable under dry conditions of supporting snow removal equipment, and aircraft rescue and fire-fighting equipment, and supporting the occasional passage of aircraft without causing major damage to the aircraft.

(d) No object may be located in any safety area, except for objects that need to be located in a safety area because of their function. These objects shall be constructed, to the extent practical, on frangible mounted structures of the lowest practical height with the frangible point no higher than 7.5 cm above grade.

Specification of paved areas maintenance is given in JCAR Part 14, Chapter (10) and CARC related guidance material.

139.305 Marking, Signs and Airfield Lighting.

(a) Each Aerodrome operator shall provide and maintain the following marking systems as appropriate for air carrier operations on the Aerodrome:

- (1) Runway markings meeting the specifications for the approach with the lowest minimums authorized for each runway.
- (2) Taxiway centerline, edge markings and aprons marking.
- (3) Signs identifying taxiing routes on the movement area.
- (4) Runway holding position markings and signs.
- (5) ILS critical area markings and signs.

(b) Each Aerodrome operator shall provide and maintain the following lighting systems as appropriate to meet minimums authorized for each runway:

- (1) Runway lighting meeting the specifications for the approach with the lowest minimums;
- (2) Taxiway and apron lighting systems.
- (3) An Aerodrome beacon.
- (4) Approach lighting meeting the specifications for the approach with the lowest minimums authorized for each runway.
- (5) Obstruction marking and lighting, as appropriate, on each object within its authority.

(c) Each Aerodrome operator shall employ preventive maintenance programs and properly maintain each marking, sign or lighting system installed on the Aerodrome which is owned by the Aerodrome operator. As used in this section, to "properly maintain" includes:

- (1) to clean, replace, or repair any faded, missing, or nonfunctional item of lighting;
- (2) to keep each item unobscured and clearly visible;
- (3) to ensure that each item provides an accurate reference to the user.

(d) Each Aerodrome operator shall ensure that all lighting on the Aerodrome, including that for aprons, vehicle parking areas, roadways, fuel storage areas, and buildings, is adequately adjusted or shielded to prevent interference with air traffic control and aircraft operations.

Note: Specifications of marking, signs and airfield lighting are given in JCAR Part 14, Chapter (5) and CARC related guidance material.

Note: Specifications on marking, signs and airfield lighting maintenance are given in JCAR Part 14, Chapter (10) and CARC related guidance material.

139.307 Snow and Ice Control.

(a) Each Aerodrome operator whose Aerodrome is located where snow and icing conditions regularly occur shall prepare, maintain, and carry out a snow and ice control plan.

(b) The snow and ice control plan required by this section shall include instructions and procedures for:

- (1) Prompt removal or control as completely as practical of snow, ice, and slush on each movement area;
- (2) Positioning snow off of movement area surfaces so that all air carrier aircraft propellers, engine pods, rotors, and wingtips will clear any snowdrift and snow bank as the aircraft's landing gear traverses any full strength portion of the movement area;
- (3) Selection and application of approved materials for snow and ice control to ensure that they adhere to snow and ice sufficiently to minimize engine ingestion;
- (4) Timely commencement of snow and ice control operations; and
- (5) Prompt notification, in accordance with 139.339, of all air carriers using the Aerodrome when any portion of the movement area normally available to them is less than satisfactorily cleared for safe operation by their aircraft.

139.309 - 139.319 Reserved

139.321 Handling and Storing of Dangerous Goods and Hazardous Substances.

(a) Each Aerodrome operator, and any other entity, which acts as a cargo handling agent at the Aerodrome shall establish and maintain procedures for the protection of persons and property on the Aerodrome during the handling and storing of any material regulated by the Dangerous Goods / Hazardous Materials Regulations, that is, or is intended to be, transported by air, or used on Aerodrome facilities. These procedures shall provide for at least the following:

- (1) Designated personnel to receive and handle hazardous substances and materials.

- (2) Assurance from the shipper that the cargo can be handled safely, including any special handling procedures required for safety.
 - (3) Special areas for storage of hazardous materials while on the Aerodrome.
- (b) Each Aerodrome operator shall establish and maintain standards acceptable to the Chief Commissioner for protecting against fire and explosions in storing, dispensing, and otherwise handling fuel, lubricants, and oxygen (other than articles and materials that are, or are intended to be, aircraft cargo) on the Aerodrome. These standards shall cover facilities, procedures, and personnel training and shall address at least the following:
- (1) Grounding and bonding.
 - (2) Public protection.
 - (3) Control of access to storage areas.
 - (4) Fire safety in fuel farm and storage areas.
 - (5) Fire safety in mobile fullers, fueling pits, and fueling cabinets.
 - (6) The fire code of the public body having jurisdiction over the Aerodrome.
- (c) Each Aerodrome operator shall, as a fueling agent, comply with and, except as provided in paragraph (h) of this section, require all other fueling agents operating on the Aerodrome to comply with the standards established under paragraph (b) of this section and shall perform reasonable surveillance of all fueling activities on the Aerodrome with respect to those standards.
- (d) Each Aerodrome operator shall inspect the physical facilities of each Aerodrome tenant fueling agent at least once every three months for compliance with paragraph (b) of this section and maintain a record of that inspection for at least 12 months. The Aerodrome operator may use an independent organization to perform this inspection if:
- (1) It is acceptable by the Chief Commissioner; and
 - (2) It prepares a record of its inspection sufficiently detailed to assure the Aerodrome operator and the CARC that the inspection is adequate.
- (e) The training required in paragraph (b)(6) of this section shall include at least the following:
- (1) At least one supervisor with each fueling agent shall have completed an aviation fuel training course in fire safety which is acceptable to the Chief Commissioner.
 - (2) All other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel shall receive at least on-the-job training in fire safety from the supervisor trained in accordance with paragraph (e)(1) of this section.
- (f) Each Aerodrome operator shall obtain certification once a year from each Aerodrome tenant fueling agent that the training required by paragraph (e) of this section has been accomplished.

(g) Unless otherwise authorized by the Chief Commissioner, each Aerodrome operator shall require each tenant fueling agent to take immediate corrective action whenever the Aerodrome operator becomes aware of noncompliance with a standard required by paragraph (b) of this section. The Aerodrome operator shall notify the CARC immediately when noncompliance is discovered and corrective action cannot be accomplished within a reasonable period of time.

(h) The Aerodrome operator shall also ensure that:

- (1) Any entity dealing with hazardous substances shall have an operation manual detailing procedures related to the handling of hazardous substances, storage, disposal as well as training requirements for personnel.
- (2) The Dangerous Goods Operation Manual is reviewed and approved by a third party every 2 years.
- (3) The procedures set in the Dangerous Goods Operations Manual are implemented.
- (4) The substances are stored in appropriate area.

139.323 Reserved

139.325 Aerodrome Emergency Plan.

Each Aerodrome operator shall develop and maintain an Aerodrome emergency plan designed to minimize the possibility and extent of personal injury and property damage at the Aerodrome in an emergency. The plan shall include a set of instructions dealing with the arrangements designed to meet emergency conditions and steps shall be taken to ensure that the provisions of the instructions are periodically tested.

Note: Specification of Aerodrome emergency planning is given in JCAR Part 14, Chapter (9).

(a) The plan shall include:

- (1) Procedures for prompt response to all of the emergencies listed in paragraph (b) of this section, including a communications network; and
- (2) Sufficient detail to provide adequate guidance to each person who shall implement it.
- (3) A system for locating and reaching each accident site in a minimum time, with adequate rescue.
- (4) Each Aerodrome shall be equipped with fire-fighting and medical equipment.
- (5) A detailed grid map(s) shall be available in the emergency plane. The grid maps shall reflect a distance of at least 100 m beyond the threshold and the Aerodrome perimeter
- (6) The full contacts list of the responsible entities from the Aerodrome operator and the parties involved with the plan, full description of the duties of each person shall be illustrated in the plan.

- (b) The plan required by this section shall contain instructions but not limited to:
- (1) Aircraft incidents and accidents;
 - (2) Bomb incidents, including designated parking areas for the aircraft involved;
 - (3) Structural fires;
 - (4) Natural disaster;
 - (5) Radiological incidents;
 - (6) Sabotage, hijack incidents, and other unlawful interference with operations;
 - (7) Failure of power for movement area lighting; and
 - (8) Water rescue situations.
- (c) The plan required by this section shall address or include:
- (1) The extent practicable, provisions for medical services including transportation and medical assistance for the maximum number of persons that can be carried on the largest air carrier aircraft that the Aerodrome reasonably can be expected to serve. The number of ambulances required to be provided on the Aerodrome shall be determined taking into considerations.
 - (i) The criteria set in Table 139.325-1 below.
 - (ii) The ability of ambulances in terms of numbers and capacity, to carry personnel teams qualified in first aid and medical supplies, which are vital to the success of initial triage in the event of an accident.
 - (iii) Arrangements are made with local health authorities to provide ambulance services, the Aerodrome operator shall ensure their ability to meet within a reasonable time a sudden demand for assistance on the scale envisaged, as well as the suitability of such ambulances for movement on the terrain in the vicinity of the Aerodrome.

Aircraft Occupants	Number of casualties (75% of occupants)	20% Casualties immediate care Priority I	30% Casualties Delayed care Priority	50% Casualties Minor care
(1)	(2)	(3)	(4)	(5)
500	375	75	113	187
450	338	68	101	169
400	300	60	90	150

350	263	53	79	131
300	225	45	68	112
250	188	38	56	49
200	150	30	45	75
150	113	23	34	56
100	75	15	23	37
50	38	8	11	19

Table 139.325-1

- (2) The name, location, telephone number, and emergency capability of each hospital and other medical facility, and the business address and telephone number of medical personnel on the Aerodrome or in the communities it serves, agreeing to provide medical assistance or transportation;
 - (3) The name, location, and telephone number of each rescue squad, ambulance service, military installation, and government agency on the Aerodrome or in the communities it serves, that agrees to provide medical assistance or transportation;
 - (4) An inventory of surface vehicles and aircraft that the facilities, agencies, and personnel included in the plan under paragraphs (c)(2) and (c)(3) of this section will provide to transport injured and deceased persons to locations on the Aerodrome and in the communities it serves;
 - (5) Each hangar or other building on the Aerodrome or in the communities it serves that will be used to accommodate uninjured, injured, and deceased persons;
 - (6) Crowd control, specifying the name and location of each safety or security agency that agrees to provide assistance for the control of crowds in the event of an emergency on the Aerodrome; and
 - (7) The removal of disabled aircraft including to the extent practical the name, location and telephone numbers of agencies with aircraft removal responsibilities or capabilities.
- (d) The plan required by this section shall provide for:
- (1) The marshaling, transportation, and care of ambulatory injured and uninjured accident survivors;
 - (2) The removal of disabled aircraft;
 - (3) Emergency alarm systems; and
 - (4) Coordination of Aerodrome and control tower functions relating to emergency actions.
- (e) The plan required by this section shall contain procedures for notifying the facilities, agencies, and personnel who have responsibilities under the plan of the

location of an aircraft accident, the number of persons involved in that accident, or any other information necessary to carry out their responsibilities, as soon as that information is available.

(f) The plan required by this section shall contain provisions, to the extent practicable, for the rescue of aircraft accident victims from significant bodies of water or marsh lands adjacent to the Aerodrome which are crossed by the approach and departure flight paths of air carriers. A body of water or marsh land is significant if the area exceeds one-quarter square mile and cannot be traversed by conventional land rescue vehicles. To the extent practicable, the plan shall provide for rescue vehicles with a combined capacity for handling the maximum number of persons that can be carried on board the largest air carrier aircraft that the Aerodrome reasonably can be expected to serve.

(g) In addition, the above, each Aerodrome operator shall:

- (1) Coordinate its plan with law enforcement agencies, rescue and firefighting agencies, medical personnel and organizations, the principal tenants at the Aerodrome, and all other persons who have responsibilities under the plan;
- (2) To the extent practicable, provide for participation by all facilities, agencies, and personnel specified in paragraph (g)(1) of this section in the development of the plan;
- (3) Ensure that all Aerodrome personnel having duties and responsibilities under the plan are familiar with their assignments and are properly trained;
- (4) At least once every 12 months, review the plan with all of the parties with whom the plan is coordinated as specified in paragraph (g)(1) of this section, to ensure that all parties know their responsibilities and that all of the information in the plan is current; and
- (5) Hold a full-scale Aerodrome emergency plan exercise at least once every 2 years.

139.327 Reserved.

139.329 Ground Vehicles.

Each Aerodrome operator shall:

- (a) Limit access to movement areas and safety areas only to those ground vehicles necessary for Aerodrome operations;
- (b) Establish and implement procedures for the safe and orderly access to (and operation on) the movement area and safety areas by ground vehicles, including provisions identifying the consequences of noncompliance with the procedures by an employee, tenant or contractor;
- (c) When an air traffic control tower is in operation, ensure that each ground vehicle operating on the movement area is controlled by one of the following:

- (1) Two-way radio communications between each vehicle and the tower.
 - (2) An escort vehicle with two-way radio communications with the tower to accompany any vehicle without a radio, or
 - (3) Measures acceptable to the Chief Commissioner for controlling vehicles, such as signs, signals, or guards, when it is not operationally practical to have two-way radio communications with the vehicle or an escort vehicle;
- (d) When an air traffic control tower is not in operation, provide adequate procedures to control ground vehicles on the movement area through prearranged signs or signals;
- (e) Ensure that each employee, tenant or contractor who operates a ground vehicle on any portion of the Aerodrome that has access to the movement area is familiar with the Aerodrome's procedures for the operation of ground vehicles and the consequences of noncompliance; and
- (f) On request by the Chief Commissioner, make available for inspection any record of accidents or incidents on the movement areas involving air carrier aircraft and/or ground vehicles.

Note: Specification of aerodrome ground movement is given in JCAR Part 14, Chapter (9) and CARC related guidance material.

139.331 Obstructions.

Each Aerodrome operator shall:

- (a) Ensure that each object in each area within its authority which exceeds any of the heights or penetrates the imaginary surfaces described in the Civil Aviation Regulations is either removed, marked or lighted. However, removal, marking and lighting is not required if it is determined to be unnecessary by the CARC upon conducting aeronautical study.
- (b) Manage the obstructions on the Aerodrome shall be the responsibility of the Aerodrome operator.

Note: Specification of obstructions is given in JCAR Part 14, Chapter (6) and CARC related guidance material.

139.333 Protection of NAVAIDs.

Each Aerodrome operator shall:

- (a) Prevent the construction of facilities on its Aerodrome as determined by the Chief Commissioner, that would derogate the operation of an electronic or visual NAVAID and air traffic control facilities in the Aerodrome;
- (b) Protect or if the owner is other than the Aerodrome operator, assist in protecting, all NAVAIDs on its Aerodrome against vandalism and theft; and
- (c) Prevent, insofar as it is within the Aerodrome's authority, interruption of visual and electronic signals of NAVAIDs.

139.335 Expansions on the Movement Area.

Management of expansions on the movement area shall be the responsibility of the Aerodrome operator to ensure that the expansions meet the requirements prescribed in this Part, regarding Aerodrome physical characteristics, visual aids and operational procedures.

139.337 Wildlife Hazard Management.

(a) Each Aerodrome operator shall provide for the conduct of a wildlife hazard assessment, acceptable to the Chief Commissioner, when any of the following events occurs on or near the Aerodrome:

- (1) An air carrier aircraft experiences a multiple bird strike.
- (2) An air carrier aircraft experiences substantial damage from striking wildlife. As used in this paragraph, substantial damage means damage or structural failure incurred by an aircraft that adversely affects the structural strength, performance, or flight characteristics of the aircraft and that would normally require major repair or replacement of the affected component.
- (3) An Air carrier experiences an engine ingestion of wildlife.
- (4) Wildlife of a size or in numbers capable of causing an event described in paragraph (a) (1), (2) or (3) of this section is observed to have access to any Aerodrome flight pattern or movement area.

(b) The wildlife hazard assessment required in paragraph (a) of this section shall be conducted by a credentialed wildlife management biologist. The assessment shall contain at least the following:

- (1) Analysis of the event or circumstances which prompted the study.
- (2) Identification of the species, numbers, locations, local movements, and daily and seasonal occurrences of wildlife observed.
- (3) Identification and location of features on and near the Aerodrome for a radius of 8 Km from ARP which attracts wildlife.
- (4) Description of the wildlife hazard to air carrier operations.
- (5) Recommended actions for reducing identified wildlife hazards to air carrier operations.

(c) The study required by paragraph (a) of this section shall be submitted to the Chief Commissioner for approval and determination on the need for a wildlife hazard management plan. In reaching this determination, the Chief Commissioner considers:

- (1) The wildlife hazard assessment;
- (2) Actions recommended in the wildlife hazard assessment to reduce wildlife hazards;
- (3) The aeronautical activity at the Aerodrome, including the frequency and size of air carrier aircraft.

- (4) The views of the Aerodrome operator.
 - (5) The views of the Aerodrome users; and
 - (6) Any other factors bearing on the matter of which the Chief Commissioner is aware.
- (d) When the Chief Commissioner determines that a wildlife hazard management plan is needed, the Aerodrome operator shall formulate and implement a plan using the wildlife hazard assessment as a basis. The plan shall:
- (1) Be submitted to and approved by the Chief Commissioner prior to implementation; and
 - (2) Provide measures to alleviate or eliminate wildlife hazards to air carrier operations; and
 - (3) As authorized by the Chief Commissioner, become a part of the Aerodrome Certification Manual.
- (e) The plan shall include at least the following:
- (1) The persons who have authority and responsibility for implementing the plan.
 - (2) Priorities for needed wildlife population management, habitat modification, and changes in land use identified in the wildlife hazard assessment with target dates for initiation and completion.
 - (3) Requirements for and, where applicable, copies of wildlife control permits.
 - (4) Identification of resources to be provided by the Aerodrome operator for implementation of the plan.
 - (5) Procedures to be followed during air carrier operations, including at least:
 - (i) Designation of personnel responsible for implementing the procedures;
 - (ii) Provision to conduct physical inspections of the movement area and other areas critical to successfully manage known wildlife hazards sufficiently in advance of air carrier operations to allow time for wildlife controls to be effective;
 - (iii) Wildlife hazard control measures; and
 - (iv) Ways to communicate effectively between personnel conducting wildlife control or observing wildlife hazards and the air traffic control tower.
 - (6) Procedures to review and evaluate the wildlife hazard management plan annually or following an event described in paragraphs (a)(1),(2), or (3) of this section, including:
 - (i) The plan's effectiveness in dealing with known wildlife hazards on, and in the vicinity of, the Aerodrome; and
 - (ii) Aspects of the wildlife hazards described in the wildlife hazard assessment that should be reevaluated.

(7) A training program to provide Aerodrome personnel with the knowledge and skills needed to carry out the wildlife hazard management plan required by paragraph (c) and (d) of this section.

(f) Notwithstanding the other requirements of this section, each Aerodrome operator shall take immediate measures to alleviate wildlife hazards whenever they are detected.

Note: Specification of the wildlife hazard management is given in JCAR Part 14, Chapter (9) and CARC related guidance materials for more.

139.339 Aerodrome Condition Reporting.

(a) Each Aerodrome operator shall provide for the collection and dissemination of Aerodrome condition information to air carriers.

(b) In complying with paragraph (a) of this section, the Aerodrome operator shall utilize the NOTAM system and, as appropriate, other systems and procedures acceptable to the Chief Commissioner.

(c) In complying with paragraph (a) of this section, the Aerodrome operator shall provide information on the following Aerodrome conditions which may affect the safe operations of air carriers:

- (1) Construction or maintenance activity on movement areas, safety areas, or loading ramps and parking areas.
- (2) Surface irregularities on movement areas or loading ramps and parking areas.
- (3) Snow, ice, slush, or water on the movement area or loading ramps and parking areas.
- (4) Snow piled or drifted on or near movement areas contrary to 139.313.
- (5) Objects on the movement area or safety areas contrary to 139.309.
- (6) Malfunction of any lighting system required by 139.311.
- (7) Unresolved wildlife hazards as identified in accordance with 139.337.
- (8) Non-availability of any rescue and firefighting capability.
- (9) Any other condition as specified in the Aerodrome certification manual or which may otherwise adversely affect the safe operations of air carriers.

139.341 Identifying, Marking, and Reporting Construction and Other Unserviceable, Restricted Areas.

Each Aerodrome operator shall:

- (1) Mark and, if appropriate, light in a manner acceptable to the Chief Commissioner:
 - (i) Each construction area and unserviceable area which is on or adjacent to any movement area or any other area of the Aerodrome on which air carrier aircraft may be operated;

- (ii) Each item of construction equipment and each construction roadway, which may affect the safe movement of aircraft on the Aerodrome; and
 - (iii) Any area adjacent to a NAVAID that, if traversed, could cause derogation of the signal or the failure of the NAVAID.
- (2) Provide procedures, such as a review of all appropriate utility plans prior to construction, for avoiding damage to existing utilities, cables, wires, conduits, pipelines, or other underground facilities.

Note: Specifications on Identifying, Marking, and Reporting Construction and Other Unserviceable, Restricted Areas are given in JCAR Part 14, Chapter (7).

139.343 Disabled Aircraft Removal.

Each Aerodrome operator shall establish procedures for removing the disabled aircraft on or adjacent to the movement area, including the following:

- (1) The roles of the Aerodrome operator and the holder of the aircraft certificate of registration;
- (2) Arrangements for notifying the holder of the certificate of registration;
- (3) Arrangements for liaising with the air traffic control unit;
- (4) Arrangements for obtaining equipment and personnel to remove the disabled aircraft; and
- (5) The names, role and telephone numbers of persons responsible for arranging for the removal of disabled aircraft.

Note: Specification of disabled aircraft removal is given in JCAR Part 14, Chapter (9) and CARC related guidance material.

139.345 Apron Management.

Each Aerodrome operator shall establish procedures for apron management, including the following:

- (1) Arrangements between air traffic control and the apron management unit;
- (2) Arrangements for allocating aircraft parking positions;
- (3) Arrangements for initiating engine start and ensuring clearance of aircraft push-back;
- (4) Marshaling service;
- (5) Leader (van) service; and
- (6) Visual monitoring of aircraft stand clearance.

139.347 Apron Safety Management.

Each Aerodrome operator shall establish procedures for apron safety management, including the following:

- (1) Protection from jet blasts;
- (2) Enforcement of safety precautions during aircraft refueling operations;
- (3) Apron sweeping;
- (4) Apron cleaning;
- (5) Arrangements for reporting incidents and accidents on an apron; and
- (6) Arrangements for auditing the safety compliance of all personnel working on the apron

139.349 Aircraft Ground Servicing.

Each Aerodrome operator shall:

- (a) Make readily available during the ground servicing of an aircraft a fire extinguishing equipment suitable for at least initial intervention in the event of a fuel fire, and personnel trained its uses.
- (b) When air aircraft refueling operations take place while passengers are embarking on board or disembarking, ground equipment shall be positioned so as to allow:
 - (1) The use of a sufficient number of exits for expeditious evacuation;
 - (2) A ready escape route from each of the exits to be used in an emergency;
 - (3) Fuel Safety zones are clear;
 - (4) Two-way communication shall be established and tested between ground staff and a qualified person on board; and
 - (5) Fuel spillage procedures are in place.
- (c) All employees shall avoid driving equipment under the aircraft wings and fuselage.
- (d) Ground servicing equipment are properly maintained and equipped with fire extinguishers.
- (e) Aircraft approach procedures are conducting when the ground servicing equipment is required.

139.351 Procedures for Aircraft Operators.

An Aerodrome operator shall develop and implement procedures for briefing aircraft operators of the necessary safety and regulatory requirements for aircraft before operation in Amman Flight Information Region (FIR) or from Jordan Territory. The Aerodrome briefing shall include but not be limited to at least the following requirements:

- (a) Provision of up to date Aerodrome information as contained in the AIP to be available to the flight crew;
- (b) Requirement for the aircraft operator to follow correct ICAO flight planning principles including the provision of aircraft registration and correct ICAO designators;

- (c) Requirement for the aircraft operator to report either flight or ground based incidents to the CARC, including bird or wildlife strikes or near misses; and
- (d) Requirement for the aircraft to be adequately equipped in accordance with the rules and regulations governing the airspace in which it will be flying.

139.353 Obligations to Restricted Certain Aircraft.

(a) In respect to 139.351, the Aerodrome operator or their agent shall ensure that procedures are developed to negate aircraft operators from operation at their Aerodrome when such aircraft operators cannot meet the Jordan regulatory requirements, or are subject to:

- (1) A ban based upon the origin of registry as notified by CARC;
- (2) A cease and desist order as notified by CARC; or
- (3) When the aircraft is subject to a grounding order as notified by CARC.

(b) The procedures above shall include immediate notification to CARC of actions taken against such aircraft or aircraft operators.

(c) The Aerodrome operator shall monitor and ensure that third parties at the Aerodrome comply with such procedures.

(d) The provision of weigh scales appropriate to the task to random check of aircraft payload shall be immediately available at the Aerodrome.

139.355 Accident and Mandatory Occurrence Reporting and Investigation.

Each Aerodrome operator shall establish procedure for:

- (1) Report accidents/incidents at the Aerodrome premises.
- (2) Remedial, investigation and corrective actions.
- (3) Accidents/incidents recording.

139.357 Low Visibility and Adverse Weather Conditions.

(a) Each Aerodrome operator shall establish

- (1) Procedures for low visibility operations.
- (2) Procedures for mitigating the effect of strong winds conditions.
- (3) Winter operations and apron hazards.
- (4) Criteria for measurement and reporting of runway visual range (RVR) when required.
- (5) A NOTAM shall be issued when RVR is below 550 m.
- (6) The availability of guiding the aircraft using follow-me cars when visibility is 550 m.

(b) The names and the telephone numbers of the responsible employees during and after working hours, responsible for measuring the RVR shall be included in the low visibility procedure.

139.359 Safety Management System.

As part of the certification process, each Aerodrome operator shall establish and maintain a Safety Management System (SMS) in accordance with the framework components and elements provided in JCAR Part 19.

139.361 Aerodrome Management - Safety Programs

The Aerodrome Operator shall:

- (1) Establish, lead and implement safety programs to promote safety and the exchange of safety-relevant information; and
- (2) Require the organizations operating or providing services at the Aerodrome to be involved in such programs.

Note: Specification of Aerodrome Management Safety Programs is available in JCAR 19.

139.363 Non Compliance Conditions.

Unless otherwise authorized by the CARC, whenever the requirements of Subpart-D of this part cannot be met to the extent that unsafe conditions are uncorrected on the Aerodrome, the Aerodrome operator shall limit air carrier operations to those portions of the Aerodrome not rendered unsafe by those conditions.

139.365 Public Protection.

(a) Each Aerodrome operator shall establish procedures for public protection, including Fencing, Gates, Terminal gates, Public information, Lighting, Firearms, Access control, Aircraft blast protection and Crowd control.

(b) Each Aerodrome operator shall provide:

- (1) Safeguards acceptable to CARC to prevent inadvertent entry to the movement area by unauthorized persons or vehicles; and
- (2) Protection of persons and property from aircraft blast.

(c) In implementation of the requirement of paragraph (a) of this section, the provided fence shall meet the requirements of the National Security Program.

139.367 Medical Services.

Each Aerodrome operator shall provide medical services, including the following:

- (a) First aid and medical arrangements.
- (b) Scales of medical services to be held at the Aerodrome.

- (c) First aid activates coordination with Aerodrome Rescue and Firefighting (ARFF).
- (d) Assistance with sick or disabled passengers.

SUBPART (E)**OBLIGATIONS OF THE AERODROME OPERATOR**

The grant of an Aerodrome certificate obliges the Aerodrome operator to ensure the safety, regularity and efficiency of operations at the Aerodrome, to allow CARC-authorized personnel access to the Aerodrome to carry out safety audits, inspections, testing and to be responsible for notifying and reporting as prescribed.

139.401 Compliance with Standards and Practices.

The Aerodrome operator shall comply with the standards and practices specified in this Part and with any conditions endorsed in the certificate.

139.403 Personnel Requirements.

(a) The Aerodrome operator shall nominate post holders, acceptable to CARC, who are responsible for the management and supervision of the following areas:

- (1) **Accountable Manager:** The Aerodrome operator shall appoint an accountable manager, who has full control of the financial resources, final authority over operations under the certificate/approval of the organisation and ultimate responsibility and accountability for the establishment, implementation and maintenance of the SMS; safety policies and the resolution of all safety issues (See JCAR Part 14 Appendix (6), Table A6-1 for Assessment Criteria);
- (2) **Aerodrome Operational Services Manager:** a senior qualified and competent person who is responsible for ensuring that the Aerodrome and its operation comply with the requirements of these regulations (See JCAR Part 14 Appendix (6), Table A6-3 for Assessment Criteria);
- (3) **Aerodrome Maintenance Manager:** a senior qualified and competent person who is responsible for ensuring that the Aerodrome maintenance programmes for safety critical infrastructure comply with the requirements of these regulations (See JCAR Part 14 Appendix (6), Table A6-4 for Assessment Criteria);
- (4) **Aerodrome Safety Management Manager:** The Aerodrome operator shall nominate a senior qualified and competent person or group of persons responsible for the development, maintenance and day-to-day management of the safety management system. Those persons shall act independently of other managers within the organisation, shall have direct access to the accountable manager and to appropriate management for safety matters and shall be responsible to the accountable manager (See JCAR Part 14 Appendix (6), Table A6-2 for Assessment Criteria).
- (5) **Aerodrome Quality Assurance Manager:** The Aerodrome operator shall nominate a senior qualified and competent person or group of persons responsible for the development, maintenance and day-to-day management of

- the quality management system. Those persons shall act independently of other managers within the organisation, shall have direct access to the accountable manager and to appropriate management for quality matters and shall be responsible to the accountable manager (See JCAR Part 14 *Appendix (6)*, Table A6-5 for Assessment Criteria).
- (b) The Aerodrome operator shall have sufficient and qualified personnel for the planned tasks and activities to be performed in accordance with the applicable requirements.
 - (c) The Aerodrome operator shall assign a sufficient number of personnel supervisors to defined duties and responsibilities, taking into account the structure of the organisation and the number of personnel employed.
 - (d) The Aerodrome operator shall ensure that personnel involved in the operation, maintenance and management of the Aerodrome are adequately trained in accordance with the Aerodrome training requirements program as specified in section 139.405.
 - (e) CARC will assess and accept each nominated Aerodrome Post Holder based on the Assessment Criteria in JCAR Part 14 *Appendix (6)*, conduct an interview with the nominee and may call for additional evidence of his/her suitability before deciding upon his/her acceptability.
 - (f) The Aerodrome Operator shall ensure that any changes to Aerodrome Post Holders are accepted by CARC prior to the change.
 - (g) Deputy Aerodrome Post Holders; when an Aerodrome Post Holder is unavailable for a period exceeding thirty days, or has left the organization, the Aerodrome operator shall ensure the availability of a deputy post holder and notify CARC of a replacement or temporary Aerodrome Post Holder.
 - (h) Each Aerodrome operator shall update its Aerodrome Manual including the organizational structure with respect to the accepted Aerodrome Post Holders.

139.405 Aerodrome Training Requirements.

- (a) The Aerodrome operator shall establish and implement a training program for personnel involved in the Operation, Maintenance and Safety Management of the Aerodrome.
 - (1) The training program shall cover:
 - (i) all personnel involved in the operation, maintenance and safety management of the Aerodrome (supervisors, managers, senior managers, and the Accountable Manager); and
 - (ii) all personnel operating unescorted on the movement area, and other operational areas of the Aerodrome, and which are related to the Aerodrome operator, or other organizations which operate or provide services at the Aerodrome, regardless of their level in the organization.
 - (2) The training of persons mentioned in paragraph (1) shall be completed prior

- to the initial performance of their duties, or allowing them unescorted access on the Movement Area and other operational areas of the Aerodrome, as appropriate.
- (3) The training program shall include Safety Management System training whose level of detail shall be appropriate to the individual's responsibility and involvement in the Safety Management System and shall also include human and organizational factors; for those persons referred to in paragraph under (1) (ii) employed by other organizations operating, or providing services at the Aerodrome, the Safety Management System training may cover only the necessary elements (e.g. relevant procedures, safety reporting system, Aerodrome safety programs, FOD awareness, etc.).
 - (4) The training program shall consist of the following:
 - (i) A process to identify training standards, including syllabus and frequency for each type of training and area of activity for the persons mentioned in paragraph (a), including for instructors and assessors, and track completion of required training;
 - (ii) A validation process that measures the effectiveness of training;
 - (iii) Initial job-specific training;
 - (iv) On-the-job training; and
 - (v) Recurrent training.
 - (5) The training program shall identify training responsibilities and contain procedures for training and checking of the trainees.
 - (6) Training contents and syllabus shall comply with the training requirements described in the Aerodrome Manual.
 - (7) A training file shall be developed for each employee, including management, to assist in identifying and tracking employee-training requirements, and verifying that personnel have received the planned training.
- (b) The Aerodrome operator shall ensure that unescorted persons operating on the movement area or other operational areas of the Aerodrome are adequately trained.
- (c) Training Instructors Qualifications
- (1) All training shall be delivered by instructors who are both:
 - (i) Competent in training techniques, demonstrated through certification such as Training of Trainers (TOT), ICAO Instructor Certification, or equivalent; and
 - (ii) Specialized in the subject matter of the training courses they deliver, with demonstrable experience in the relevant operational, safety, or technical field.
 - (2) The Aerodrome operator shall ensure that instructor qualifications are documented and maintained, including:

- (i) Academic or professional qualifications,
 - (ii) Relevant operational/technical experience, and
 - (iii) Evidence of instructional or facilitation skills.
 - (iv) Evidence of recent activity (within the last 2 years) in the subject area to ensure currency.
- (3) The Civil Aviation Authority may review and approve the qualifications of instructors to ensure that the training provided meets the regulatory and operational needs of the Aerodrome.
- (d) Training Records
- (1) The Aerodrome operator shall maintain records of the training sessions that have been provided, including as a minimum the following:
- (i) Starting date of employment/ending date of employment (if applicable);
 - (ii) Area of training and subjects covered;
 - (iii) Names of participants/signed list of participants;
 - (iv) Date and duration of training; and
 - (v) Name of the instructor.
- (2) Training Records of Individuals: The training records maintained for each individual shall include as a minimum:
- (i) The name of the trainee;
 - (ii) The date(s) and the duration of the training;
 - (iii) The place where the training was received;
 - (iv) The name of the organization that provided the training;
 - (v) The subjects covered, and the methodology of the course;
 - (vi) Any comments made by the instructor if applicable;
 - (vii) Performance evaluation of the trainee if applicable; and
 - (viii) The name and signature of the instructor.

139.407 Aerodrome Operation and Maintenance.

- (a) Subject to any directives that CARC may issue, the Aerodrome operator shall operate and maintain the Aerodrome in accordance with the procedures set out in the Aerodrome certification manual.
- (b) To ensure the safety of aircraft, CARC may give written directives to an Aerodrome operator to alter the procedures set out in the Aerodrome certification manual.
- (c) The Aerodrome operator shall ensure proper and efficient maintenance of the Aerodrome facilities.

(d) The Aerodrome operator shall coordinate with the ATS provider in order to be satisfied that appropriate air traffic services are available to ensure the safety of aircraft in the airspace associated with the Aerodrome. The coordination shall cover other areas related to safety such as aeronautical information service, air traffic services, designated meteorological authorities, and security.

(e) The Aerodrome operator shall inspect and maintain the lighting and marking for any obstacle in the Aerodrome or within the vicinity of the Aerodrome.

The Aerodrome operator shall be responsible for providing the emergency power supply on Aerodromes and shall be responsible for the required maintenance for the emergency power supply, in the case of a malfunction in the emergency power supply the Aerodrome operator shall notify CARC immediately.

139.409 Safety Data and Performance Management

Aerodrome Safety Data

(a) The aerodrome operator shall establish, implement, and maintain a documented system acceptable to the Civil Aviation Regulatory Commission (CARC) for the collection, storage, analysis, and protection of safety-related data, and for the development and monitoring of Safety Performance Indicators (SPIs) in accordance with the operator's Safety Management System (SMS).

(b) The system shall, at a minimum, ensure that data is obtained from the following sources:

1. Reports of accidents, incidents, and other occurrences, whether mandatory or voluntary.
2. Hazard reports, including wildlife strikes and foreign object debris (FOD).
3. Safety audits, inspections, and surveillance conducted by CARC or other entities.
4. Operational and maintenance records relevant to safety.
5. Reports from tenants, contractors, service providers, and other stakeholders as required by CARC.

(c) The aerodrome operator shall ensure that safety data is accurate, complete, timely, and traceable. The CARC may review and audit the processes for data management to verify compliance.

(d) Aerodrome operators shall analyze safety data to identify hazards, trends, and emerging safety issues and shall submit analysis results to CARC as prescribed. CARC may require additional studies or corrective actions based on the findings.

(e) Safety data shall be managed in a manner consistent with just culture principles and confidentiality. The CARC shall ensure that access is controlled and information shared externally only for safety and regulatory purposes.

Safety Performance Management

- (f) Each aerodrome operator shall develop and maintain CARC-accepted SPIs to measure the effectiveness of its SMS and overall safety performance.
- (g) The operator shall document SPIs and associated targets and alert levels in its Aerodrome Certification Manual or SMS documentation and make them available to CARC upon request.
- (h) SPIs and related performance shall be monitored and reviewed at intervals acceptable to CARC. Any deviation from target or exceedance of alert levels shall be reported to CARC, and corrective action plans shall be implemented as directed.
- (i) Aerodrome operators shall submit periodic reports to CARC on safety data analysis, SPI results, and significant safety trends, in the manner and frequency specified by CARC.

139.411 Safety Audits and Safety Reporting.

- (a) The Aerodrome operator shall arrange for an internal audit of the safety management system, including an inspection of the Aerodrome facilities and equipment. The audit shall cover the Aerodrome operator's own functions. The Aerodrome operator shall also arrange an external audit and inspection program for evaluation of other users including fixed-base operators, ground handling agencies and other organizations working at the Aerodrome.
- (b) The audits referred to in 139.411 (a) shall be carried out every 12 months or less, as agreed with the Chief Commissioner.
- (c) The Aerodrome operator shall arrange for an external audit on its SMS in addition to the aerodrome facilities and equipment. The audit shall cover the aerodrome operator's own functions.
- (d) The audits referred in 139.411 (c) shall be carried out every 36 months or less, as agreed with the Chief Commissioner.
- (e) The Aerodrome operator shall ensure that the audit reports including the report on the Aerodrome facilities, equipment and services, are prepared by suitably qualified safety experts.
- (f) The Aerodrome operator shall retain a copy of the report(s) referred to in 139.411 (c) for a period of three years. The Chief Commissioner may request a copy of the report(s) for its review and reference.
- (g) The report(s) referred to in regulation 139.411 (c) shall be prepared and signed by the persons who carried out the audits and inspections.

139.413 Access to the Aerodrome.

- (a) Personnel so authorized by CARC may inspect and carry out tests on the Aerodrome facilities, services and equipment, inspect the Aerodrome operator's documents and records and verify the Aerodrome operator's safety management system before the Aerodrome certificate is granted or renewed and, subsequently, at any other time, for the purpose of ensuring safety at the Aerodrome;
- (b) An Aerodrome operator shall, at the request of the authorized person, allow access to any part of the Aerodrome or any Aerodrome facility, including equipment, records, documents and operator personnel, for ensuring safety at the Aerodrome;
- (c) The Aerodrome operator shall cooperate in conducting the following:
 - (1) Inspect and carry out tests on the Aerodrome facilities, services and equipment;
 - (2) Inspect the Aerodrome operator's documents and records and verify the Aerodrome operator's safety management system.

139.415 Notifying and Reporting.

- (a) An Aerodrome operator shall notify and report to the Chief Commissioner, Aeronautical Information Service (AIS) and air traffic control at the Aerodrome within the specified time limits required by these regulations.

An Aerodrome operator shall establish quality system procedures to assure that Aerodrome related aeronautical data in accordance with the accuracy and integrity requirements set forth in JCAR Part 14 appendix (5) tables A5-1 to A5-5.

- (b) Notification of inaccuracies in Aeronautical Information Service (AIS) publications:

An Aerodrome operator shall review the issues of Aeronautical Information Publication (AIP), AIP Supplements, AIP Amendments, and Notices to Airmen (NOTAM), Pre-flight Information Bulletins and Aeronautical Information Circulars issued by the AIS on initial receipt thereof and at regular intervals thereafter. Immediately after such reviews, an Aerodrome operator shall notify AIS of any inaccurate information contained, therein, that pertains to the Aerodrome.

- (c) Notification of changes in Aerodrome facilities, equipment, and level of service planned in advance:

An Aerodrome operator shall submit a request for approval from the Chief Commissioner in writing at least three months before any change to the Aerodrome facility or equipment or the level of service at the Aerodrome that has been planned in advance and that is likely to affect the accuracy of the information contained in any AIS publication referred to in paragraph (b) of this section.

- (d) Issues requiring immediate notification: An Aerodrome operator shall immediately notify the AIS and air traffic control at the Aerodrome the details of any of the following circumstances of which the operator has the knowledge:

- (1) Obstacles, obstructions and hazards:
 - (i) Any projections by an object through an Obstacle Limitation Surface (as approved by the Chief Commissioner) relating to the Aerodrome; and
 - (ii) The existence of any obstruction or hazardous condition affecting aviation safety at or near the Aerodrome;
- (2) Level of service: Reduction in the level of service at the Aerodrome as set out in any of the AIS publications referred to in paragraph (b) of this section;
- (3) Movement area: Closure of any part of the movement area of the Aerodrome; and
- (4) Any other condition that could affect aviation safety at the Aerodrome and against which precautions are warranted.

139.417 Self-Inspection Program.

(a) Each Aerodrome operator shall inspect the Aerodrome to assure compliance with this subpart:

- (1) Daily inspection, except as otherwise required by the Aerodrome certification manual;
- (2) When required by any unusual condition such as construction activities or meteorological conditions that may affect safe air carrier operations;
- (3) Night inspections including the evaluation and checking for compliance with the standard related to runway, taxiway and apron lighting and signage, pavement marking aerodrome beacons, wind direction indicator lighting, obstacle lighting and the marking and lighting of construction areas; and
- (4) Special Inspections as circumstances require, to ensure aviation safety:
 - (i) Immediately after an accident or incident;
 - (ii) During any period of construction or repair of the Aerodrome facilities or equipment that is critical to the safety of aircraft operation; and
 - (iii) At any other time when there are conditions at the Aerodrome that could affect aviation safety.

(b) Each Aerodrome operator shall provide the following:

- (1) Equipment for use in conducting safety inspections of the Aerodrome;
- (2) Procedures, facilities, and equipment for reliable and rapid dissemination of information between Aerodrome personnel and its air carriers;
- (3) Procedures to ensure that qualified inspection personnel perform the inspections; and
- (4) A reporting system to ensure prompt correction of unsafe Aerodrome conditions during the inspection.

(c) Each Aerodrome operator shall prepare and keep for at least 6 months, and make available for inspection by the Chief Commissioner on request, a record of each inspection prescribed by this section, showing the conditions found and all corrective actions taken.

139.419 Warning Notices.

When low flying aircraft, at or near an Aerodrome, or taxiing aircraft are likely to be hazardous to people or vehicular traffic, the Aerodrome operator shall:

- (a) Post hazard warning notices on any public way that is adjacent to the maneuvering area; or
- (b) If such a public way is not controlled by the Aerodrome operator, inform the authority responsible for posting the notices on the public way that there is a hazard.

139.421 Operation and Maintenance Procedures.

- (a) The Aerodrome operator shall produce and implement the necessary procedures for the operation and the maintenance of the Aerodrome for the safety of the operations.
- (b) The Aerodrome operator shall provide The Chief Commissioner with a complete and current copy of the Aerodrome operation and maintenance procedures for his approval.

139.423 Notification of Changes

An Aerodrome operator shall notify the Chief Commissioner for his approval, as soon as practicable, of any major alterations that the operator intends to make to the procedures.

APPENDIX (1)

PARTICULARS TO BE INCLUDED IN AN AERODROME MANUAL

1. General

- 1.1 Purpose and scope of the Aerodrome Manual;
- 1.2 Statement of legal requirements for an Aerodrome Certificate or Landing Area Acceptance and the Aerodrome Manual as prescribed in these regulations;
- 1.3 Conditions for use of the aerodrome including:
 - (a) a statement of the Aerodrome Reference Code, as identified from Chapter 1 section 1.5, indicating the largest aircraft type the aerodrome intends to serve; and type of traffic;
 - (b) the operating or planned modality of the runway(s); and
 - (c) the lowest meteorological conditions permitted for aircraft arrivals and departures at the aerodrome;
- 1.4 Any limitations on the operation of the aerodrome, including areas excluded from use by commercial aircraft;
- 1.5 The available aeronautical information system and procedures for its promulgation;
- 1.6 The system for recording aircraft movements;
- 1.7 The name, position and telephone numbers of the person who has overall/assigned responsibility at the aerodrome for aerodrome certification and safety issues; and
- 1.8 Statement of the obligations of the Aerodrome Operator.

2. Particulars of the Aerodrome Site

Note (1): Aerodrome Operators are encouraged to provide the following diagrams in a format that will permit the Authority to produce charts in accordance with the specifications of ICAO Annex 4. The use of AutoCAD files in DWG or DXF format and geographically aligned and georeferenced to WGS84 is preferable.

Note (2): The size of the plans shall be commensurate with the size and complexity of the aerodrome, however ideally an A3 or A4 size drawing shall be included in the Aerodrome Manual. The scale of the plans shall be sufficiently large to show clearly all the elements listed in the following clauses.

2.1 Location Plan

Plan of the aerodrome location showing the aerodrome as expressly set aside for aerodrome purposes, including any Aerodrome Facilities and Equipment outside the boundaries of the aerodrome proper.

Note: The aerodrome location plan shall be presented on a background showing the significant and general topographical features of the area i.e. wadi, hills, etc.; features

such as roads, nearest town/city or other populous areas; and the location of any Aerodrome Facilities and Equipment outside the boundaries of the aerodrome.

2.2 Boundary Plan

A plan showing the boundaries of the aerodrome and permanent survey points. This would normally be shown on a Title Deed. If the boundaries of the aerodrome are not defined in the documents of the Title - provide details of claim to land or interest in, the property on which the aerodrome is located and a plan showing the boundaries and position of the aerodrome.

Note: A linear scale shall be shown.

2.3 Aerodrome Plan

Plan of the aerodrome showing the aerodrome facilities for the operation of the aerodrome including (where applicable):

- (a) Aerodrome Reference Point with elevation and geographical coordinate (WGS84) labelled;
- (b) runways with dimensions labelled;
- (c) runway surface types (concrete, asphalt, gravel, etc.) labelled;

Note: Bearing strengths or aircraft type restrictions may be shown in tabular form.

- (d) runway end elevations;
- (e) runway strip with dimensions labelled;
- (f) stopway with stopway end elevation;
- (g) clearway with dimensions labelled, and clearway end elevations;
- (h) Runway End Safety Area;
- (i) approach lighting;
- (j) taxiways with names;
- (k) taxiway surface types (concrete, asphalt, gravel, etc.) labelled;

Note: Bearing strengths or aircraft type restrictions may be shown in tabular form.

- (l) apron with names (T1, T2, Cargo etc.);
- (m) navigational aids labelled with type (VOR, DME, etc.) showing critical and sensitive areas identified where possible;
- (n) localizer array aerals (with critical and sensitive areas shown);
- (o) glide path aerals (with critical and sensitive areas shown);
- (p) airside roads;
- (q) terminal buildings;
- (r) Aerodrome fire stations;

- (s) aerodrome control tower;
- (t) power supply buildings;
- (u) other main buildings relevant to the operation of the aerodrome;
- (v) airside/landside perimeter fence;
- (w) airside/landside perimeter gates (with gate numbers labelled);
- (x) meteorological facilities including wind indicators;
- (y) boundary of the air traffic control service; and
- (z) any part of the Movement Area permanently unsuitable for aircraft and clearly marked as such.

Note: A linear scale shall be shown

2.4 Apron Plan

Plan of the apron areas including (where applicable):

- (a) apron with identifying names;
- (b) bearing strengths or aircraft type restrictions;

Note: Bearing strengths or aircraft type restrictions may be shown in tabular form.

- (c) apron markings associated with the movement and parking of aircraft;
- (d) aircraft parking bay designations clearly labelled;
- (e) apron markings associated with the parking of vehicles and equipment;
- (f) apron markings associated with the operation of vehicles;
- (g) location of any nose in guidance system;
- (h) any run-up bays or engine start points;
- (i) the limits of the apron area;
- (j) the boundary of the air traffic control service;
- (k) any buildings that front onto the apron;
- (l) access gates to the airside area;
- (m) a table showing the maximum aircraft code, type, or size permitted to park on each aircraft stand;
- (n) helicopter landing sites and helicopter aiming points; and
- (o) any part of the apron area permanently unsuitable for aircraft and clearly marked as such.

Note: A linear scale shall be shown

2.5 Ground Movement Plan

Plan of ground markings used for aircraft guidance showing

- (a) all runway markings;

- (b) markings in pre threshold areas; and
- (c) taxiway and taxilane markings.

2.6 Lighting Plan

Plan of the airfield lighting showing, where applicable

- (a) approach lights;
- (b) runway threshold lights;
- (c) runway threshold identification lights;
- (d) runway edge lighting;
- (e) runway end lighting;
- (f) stopway lights;
- (g) visual landing aids (e.g. PAPI);
- (h) turning bay lights;
- (i) runway guard lights;
- (j) stop bar and intermediate taxiway holding position lighting;
- (k) taxiway lighting;
- (l) apron flood lighting;
- (m) obstacle lights on the aerodrome;
- (n) illuminated windsocks.

3. Particulars of the Aerodrome Required to be Reported to AIS

Note: Accuracy of the information is critical to aircraft safety. Information requiring engineering survey and assessment shall be gathered or verified by qualified technical persons.

3.1 A description of the procedures used for obtaining aeronautical data, ensuring it meets quality standards, promulgation to the Aeronautical Information Service and review of the published information.

3.2 General Information

- (a) name of the aerodrome;
- (b) location of the aerodrome;
- (c) geographical coordinates of the Aerodrome Reference Point determined in terms of World Geodetic System - 1984 (WGS-84 – ITRF93) reference datum;
- (d) aerodrome elevation and geoid undulation;
- (e) the elevation of each threshold and Geoid Undulation, the elevation of the runway end and any significant high and low points along the runway, and the highest elevation of the Touchdown Zone of a precision approach runway;

- (f) aerodrome reference temperature;
- (g) details of the aerodrome beacon; and
- (h) name of the Aerodrome Operator and the address and telephone numbers at which the Aerodrome Operator may be contacted at all times.

3.3 Aerodrome Dimensions and Related Information

- 3.3.1 Runway true bearing, designation number, length, width, displaced threshold location, slope, surface type, type of runway, and for a precision approach runway, the existence of an Obstacle Free Zone;
- 3.3.2 Length, width and surface type of strip, Runway End Safety Areas, stopways;
- 3.3.3 Width and surface type of taxiways;
- 3.3.4 Apron surface type and aircraft stands;
- 3.3.5 Length and ground profile of clearway;
- 3.3.6 Visual aids for approach procedures i.e. approach lighting type and precision approach path indicator system (PAPI); marking and lighting of runways, taxiways, and aprons; other visual guidance and control aids on taxiways (including runway holding positions, Intermediate Holding Positions and stop bars) and aprons, location and type of visual docking guidance system; availability of standby power for lighting;
- 3.3.7 Location and radio frequency of VOR aerodrome checkpoint;
- 3.3.8 Location and designation of standard taxi-routes;
- 3.3.9 The geographical co-ordinates of each threshold;
- 3.3.10 The geographical coordinates of appropriate taxiway centre line points;
- 3.3.11 The geographical co-ordinates of each aircraft stand;
- 3.3.12 The geographical coordinates and the top elevation of significant obstacles in the approach and take-off areas, in the circling area and in the vicinity of the aerodrome. (The information may best be shown in the form of charts such as those required for the preparation of aeronautical information publications as specified in ICAO Annexes 4 and 15);
- 3.3.13 Pavement surface type and bearing strength using Aircraft Classification Rating Pavement Classification Rating (ACR-PCR) Method;
- 3.3.14 One or more pre-flight altimeter check locations established on an apron and their elevation;
- 3.3.15 Declared Distances:
 - (a) Take-off Run Available (TORA);
 - (b) Take-off Distance Available (TODA);
 - (c) Accelerate-Stop Distance Available (ASDA); and
 - (d) Landing Distance Available (LDA).

Note: Declared Distances for Intersection Take-offs must also be included. See Chapter 2, Section 2.8 for additional guidance.

3.3.16 Disabled Aircraft Removal Plan

- (a) The telephone/telex/facsimile numbers and e-mail address of the aerodrome coordinator for the removal of a disabled aircraft on or adjacent to the Movement Area; and
- (b) Information on the capability to remove a disabled aircraft, expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove.

3.3.17 Rescue and Firefighting Services

Level of protection provided, expressed in terms of the category of the rescue and firefighting services, which shall be in accordance with the longest aircraft normally using the aerodrome and the type and amounts of extinguishing agents normally available at the aerodrome. Nominate the Fire Command call frequency as 121.6 MHZ.

4. Synopsis of the Aerodrome Operating Procedures and Safety Measures

4.1 Reporting Aerodrome Information

4.1.1 Synopsis of the procedures for reporting aerodrome information, or any changes to the aerodrome information as set out in the Jordan Aeronautical Information Publication and procedures for requesting the issue of NOTAMS, including the following:

- (a) Procedures for checking the accuracy of information, both prior to and following promulgation;
- (b) Procedures for issuing NOTAM during and outside normal hours of aerodrome operation;
- (c) Procedures for changing information in the AIP; and
- (d) Procedures for providing aerodrome briefing to aircraft operators as required by JCAR Part 139 paragraph 139.359 (e); (see 139.359, added new section)

4.1.2 Names and roles of persons responsible for notifying the changes and their telephone number during and outside the normal hours of aerodrome operations; and

4.1.3 The location and telephone numbers, as provided in the Jordan AIP (Part 1 – Gen 3.1), of the place at which changes are to be reported to Aeronautical Information Services.

4.2 Access to Aerodrome Movement Area

4.2.1 Synopsis of the procedures developed and to be followed in coordination with the agency responsible to prevent unlawful interference in civil aviation at the aerodrome, for preventing unauthorised entry of persons, vehicles, equipment, animals or other things, into the Movement Area including the following:

- (a) The role of each agency with a key responsibility for aerodrome security;

- (b) Control of access of personnel and contractors;
- (c) Control of access of vehicles and equipment, including issuing of “approval” for vehicles to operate airside.

4.2.2 The names and roles of the aerodrome personnel responsible for controlling access to the aerodrome and the telephone number for contacting those personnel during and after working hours.

4.3 Aerodrome Movement Area Inspections

4.3.1 Synopsis of the procedures for the daily inspection of the aerodrome Movement Area and obstacle limitation surfaces, including the following:

- (a) Description of the inspections undertaken, and frequency (including timing), to ensure the Movement Area is clear of FOD, harmful irregularities, temporary obstructions or hazardous conditions. A copy of the inspection checklists used must also be provided;
- (b) Details of record keeping arrangements and location of the records, including corrective actions taken;
- (c) Description of means of communicating with the aerodrome air traffic services and Apron Management Service during the inspection;
- (d) Procedures for reporting the results of the runway, taxiway and apron inspections to unit(s) responsible for control of aircraft on the Movement Area, and parties responsible for rectification of any deficiencies found;
- (e) Procedures for restricting aircraft operations on portions of the aerodrome where an unsafe condition exists.
- (f) The names and roles of persons responsible for carrying out Movement Area inspections and their telephone numbers during and after working hours.

4.4 Aerodrome Electrical System and Visual Aids

4.4.1 Synopsis of facilities and procedures for the inspection and maintenance of the aerodrome electrical system, aeronautical lights (including obstacle lighting), signs, and marking, including the following:

- (a) Electrical
 - (i) Description of the aerodrome electrical distribution system, including secondary power supply;
 - (ii) A single line diagram showing as built system;
 - (iii) Description of method of testing, including frequency, of secondary power supply;
- (b) Airfield Lighting
 - (i) Description of airfield ground lighting at the aerodrome, including VDGS;
 - (ii) Description of lighting circuitry;
 - (iii) Details of inspection schedule, type of inspection/calibration conducted;
 - (iv) A copy of the checklists used;

- (v) Details of record keeping arrangements, including corrective actions taken;
 - (vi) Procedures for reporting the results of the inspection to unit(s) responsible for control of aircraft on the Movement Area, and parties responsible for rectification of any deficiencies found;
 - (vii) Description of preventative maintenance measures undertaken;
 - (viii) Description of emergency maintenance procedures;
 - (ix) Details of the number of personnel involved including shift structure to maintain airfield lighting;
- (c) Signs and Markings
- (i) Details of inspection schedule and type of inspection conducted;
 - (ii) A copy of the checklists used;
 - (iii) Details of record keeping arrangements, including corrective actions taken;
 - (iv) Procedures for reporting the results of the inspection to unit(s) responsible for control of aircraft on the Movement Area, and parties responsible for rectification of any deficiencies found;
 - (v) Description of preventative maintenance measures undertaken;
- (d) The names and roles of persons responsible for the operation and maintenance of the
- (i) Electrical system;
 - (ii) Airfield lighting;
 - (iii) Airfield signs;
 - (iv) Pavement markings;

including their telephone numbers for contacting these persons during and after working hours.

4.5 Aerodrome Movement Area Maintenance

4.5.1 Synopsis of pavement maintenance programme (preventative and reactive measures) and pavement management system used for the maintenance of the Movement Area, including:

- (a) Pavement inventory: Details of paved areas including year of construction, pavement type and strength and year of most recent major rehabilitation for each applicable area;
- (b) Inspection schedule and type of inspections/surveys/assessments conducted for paved and unpaved areas including runway and taxiway strips;
- (c) Details of record keeping arrangements, including corrective actions taken;
- (d) Arrangements for maintaining the paved areas clear of FOD;
- (e) Details concerning friction testing, assessment and corrective programme for removal of rubber build up or surface rehabilitation on the runway;
- (f) Details for maintaining aerodrome drainage system and ensuring it is

- adequate and serviceable; and
- (g) Details of how overweight operations are regulated in relation to Chapter 2, section 2.6.7 (if applicable);

4.5.2 The names and roles of persons responsible for the maintenance of the aerodrome Movement Area and their telephone numbers during and after working hours.

4.6 Aerodrome Works Safety

4.6.1 Synopsis of the procedures for planning and carrying out works safely, on or in the vicinity of the Movement Area or those areas that may extend above the obstacle limitation surfaces, including the following:

- (a) Description of methodology used for the development of a safety plan, including the development of checklists and control of contractors working airside;
- (b) Description of methodology used for implementing works safety plan including use of works notification systems and work authority permits;
- (c) Description of procedures used for closing off, reopening areas for aircraft use and the formal acceptance of Work Areas prior to returning them to serviceability on a daily basis;
- (d) Description of the supervision arrangement for early detection of deviations from intended practices or procedures or systems, if applicable;
- (e) Arrangement for communicating with the Air Traffic Services Unit and/or
- (f) Apron Management Service Unit during the progress of such works;

4.6.2 Names, telephone numbers and roles of the persons responsible for planning and implementing aerodrome works safety plans including telephone numbers to contact those persons during and after work hours

4.7 Apron Management

4.7.1 Synopsis of the procedures used for apron management, including the following interaction between the Air Traffic Services Unit and the Apron Management Service including the following;

- (a) Description of geographical area of responsibility, i.e. point of transfer of control of aircraft between aerodrome air traffic unit and Apron Management Service/Unit;
- (b) Details of procedures for transfer of control for arriving and departing aircraft between service units (if applicable);
- (c) Arrangements for allocating aircraft parking positions;
- (d) Arrangements for ensuring that the aircraft stand is available, equipment serviceable and the stand clear of FOD, obstructions/vehicles prior to entry by aircraft, and relaying that information to the service unit responsible for the control of the aircraft onto the aircraft stand;
- (e) Details of procedures/systems used for guidance of aircraft onto the aircraft stand and to/from the Manoeuvring Area;

- (f) Arrangements for initiating engine start and ensuring clearance of aircraft from mobile or fixed objects during push-back; and
- (g) Details of who provides follow me (vehicle) service if required, and how instructions are relayed between the control service/vehicle/aircraft.

4.7.2 The names and roles of person(s) responsible for the Apron Management Service/Aircraft Stand Allocation including their telephone numbers during and after working hours.

4.8 Apron Safety Management

4.8.1 Synopsis of procedures and facilities used to ensure apron safety, including

- (a) Protection from jet blast;
- (b) Protection from foreign object debris;
- (c) Description of contingency measures in place for response to spillages of hydrocarbon substances including cleaning of apron surfaces;
- (d) Enforcement of apron safety precautions during refuelling operations;
- (e) Details for reporting incidents/accidents on the apron and investigation and analysis of such occurrences;
- (f) Details for auditing the safety compliance by all personnel working on the apron; and
- (g) Details of any apron/ground safety committee established for promoting apron safety at the aerodrome.

4.8.2 The names and roles of person(s) responsible for apron safety oversight including their telephone numbers during and after working hours.

4.9 Airside Vehicle Control

4.9.1 Synopsis of the procedures for the control of surface vehicles operating on, or in the vicinity of, the Movement Area, including the following:

- (a) Details of the applicable traffic rules (including speed limits and the means of enforcement of the rules);
- (b) Details of requirements for vehicle serviceability requirements;
- (c) A description of the method for issuing driving permits for operating vehicles in the Movement Area; and
- (d) A description of the method for issuing vehicle permits/authorisation for vehicles and ground service equipment. Special attention needs to be given for the types of vehicles/equipment that will remain airside.

4.9.2 The names and roles of person(s) responsible for airside driving including their telephone numbers during working hours.

4.10 Wildlife Hazard Management

4.10.1 Synopsis of the methodologies to deal with danger to aircraft operations caused by the presence of bird or mammals on the aerodrome or in the flight pattern, following shall be detailed within the Aerodrome Operator's Wildlife Hazard Management Plan.

4.10.2 Names and roles of the persons responsible for dealing with wildlife hazards, and their telephone numbers during and after working hours.

4.11 Obstacle Control

4.11.1 Synopsis of the system used to control and remove obstacles at the aerodrome and its environs including:

- (a) Description of the methodology used to determine the existence of obstacles on the aerodrome and in its environs, including the frequency of assessment or confirmation;
- (b) Description of the methodology used to control new obstacles at the aerodrome or in its environs; including new building developments;
- (c) Description of the system in place to remove existing obstacles from the aerodrome and its environs;
- (d) Details of the procedures used for notifying the Authority of the nature and location of obstacles and any subsequent addition or removal of obstacle for action as necessary including amendment of the Aeronautical Information Service publications; and
- (e) Description of the system in place to obtain and report obstacles and terrain data to the Authority in the applicable data collection areas.

4.11.2 Names and roles of the persons responsible for aerodrome safeguarding and the management and control of obstacles at the aerodrome, and their telephone numbers during and after working hours.

4.12 Handling of Hazardous Material

Synopsis of the procedures used for the safe handling and storage of hazardous material on the aerodrome, including the following:

- (a) Details of special areas on the aerodrome set-up for the storage of flammable liquids (including aviation fuels) and any other hazardous material;
- (b) The method to be followed for the delivery, storage, dispensing and handling of hazardous materials;
- (c) Description of the system in place to test the quality of aviation fuel prior to dispensing into aircraft; and
- (d) Description of the procedures in place on the apron to ensure safety during aircraft refuelling/defueling operations.

4.13 Adverse Weather Conditions

4.13.1 Synopsis of procedures to be introduced for Low Visibility Operations, including:

- (a) A statement of operation providing detail as to what the lowest limit (meteorological condition) aircraft approaches and/or departures has been accepted by the Authority for the aerodrome,
- (b) Details of how measurement and reporting of Runway Visual Range is made;
- (c) A description of pre-LVO measures and at what stage(s) they are implemented;
- (d) Description of system used to control aircraft and vehicles during low visibility operations.

4.13.2 Synopsis of procedures for notification of severe weather conditions, including:

- (a) Overview of the methodology in determining severe weather conditions such as high-winds, heavy rains or sandstorms; and
- (b) Description of procedure or system used to notify aerodrome stakeholders (ground based) of severe weather conditions.

4.13.3 Names and roles of the persons responsible for control of the procedures related to Adverse Weather Conditions at the aerodrome, and their telephone numbers during and after working hours.

4.14 Protection of Radar and Navigational Sites

4.14.1 Synopsis of the procedures for the protection and operations and maintenance of radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following:

- (a) Description of aerodrome navigation aids;
- (b) Details of inspection schedule, type of inspection/calibration conducted;
- (c) A copy of the checklists used;
- (d) Details of record keeping arrangements, including corrective actions taken;
- (e) Procedures for reporting the results of the inspection to unit(s) responsible for control of aircraft on the Movement Area, and parties responsible for rectification of any deficiencies found, and follow up;
- (f) Description of preventative maintenance measures undertaken;
- (g) Details of the number of personnel involved including shift structure to maintain the navigation aids for the aerodrome;
- (h) A description of the maintenance schedule programme;
- (i) The arrangement for the control of activities in the vicinity of radar and navaids installations to ensure that there is no interference of signal;
- (j) arrangements for ground maintenance in the vicinity of these installations; and
- (k) arrangements for the supply and installation of signs warning of hazardous microwave radiation.

4.14.2 Names and roles of persons responsible for operations and maintenance of radio navigation aids on the aerodrome including telephone numbers for contact during and after work hours.

4.15 Aerodrome Briefing

A description of the system implemented to brief Air Transport Operators and Air Carriers, of the necessary safety and regulatory requirements for aircraft before operating in the Jordan FIR or from Jordan Territory.

4.16 Handling of Blacklisted Aircraft

Details of the procedures adopted to negate aircraft operators from operating at their aerodrome when such aircraft operators cannot meet the Jordan regulatory requirements 139.353, or are subject to:

- (a) a ban based upon the origin of registry as notified by the Authority;
- (b) a cease and desist order as notified by the Authority; or
- (c) when the aircraft is subject to a grounding order as notified by the Authority.

5. Rescue and Firefighting (RFF) Requirements

5.1 The name and role of the person responsible for the provision of the Aerodrome Rescue Fire Service including the telephone number for contacting that person during and after working hours.

5.2 High-level Policy statement of the RFF category(s) to be provided.

5.3 At aerodromes where a higher category is available by prior arrangement The Manual shall clearly state the actions necessary to upgrade the facility.

5.4 The Aerodrome Operator objectives for each RFF category provided shall be defined.

5.5 This shall include a chart of:

- (a) Amounts of media provided;
- (b) Discharge rates;
- (c) Number of foam-producing appliances;
- (d) Manning levels; and
- (e) Levels of supervision.

Note: When the objectives are higher than those set out in these regulations, Aerodrome Operators may also wish to indicate the operational levels acceptable under their safety policies.

5.6 Indicating how the adequacy of the response time capability throughout their functions and locations is monitored and maintained.

5.7 Indicating how RFF personnel engaged in extraneous duties are managed to ensure that response capability is not affected.

5.8 Where the aerodrome provides specialist equipment such as water tankers, rescue craft, emergency tenders, hose layers, appliances with aerial capability, etc.,

details shall be included in the Aerodrome Manual. Procedures to be followed if these facilities are temporarily unavailable shall also be included.

5.9 Where the aerodrome is reliant upon other organisations to provide equipment which is essential for ensuring safe operation of the aerodrome (perhaps water rescue), policies or letters of agreement shall be included in the Aerodrome Manual.

5.10 Where necessary, contingency plans in the event of non-availability shall be described.

5.11 A high-level statement describing the process by which Aerodrome Operators to select and retain RFF personnel.

5.12 A high-level statement describing the process by which Aerodrome Operators ensure the initial and continued competence of their RFF personnel.

5.13 Procedures indicating how accidents within 1000 m of the threshold of each runway are to be accessed. Where other difficult environs exist the Manual shall indicate how these are to be accessed.

5.14 Where Aerodrome Operators expect the RFF facility to respond to domestic fires or special services, procedures for managing the impact of this upon the normal aircraft RFF response shall be included.

5.15 Where Aerodrome Operators expect the RFF facility to respond to aircraft accidents landside/off aerodrome, the policy shall be clearly described. This shall include procedures to manage the effects on continued aircraft operations.

5.16 The availability of additional water supplies following an aircraft accident shall be described. Details of the policy to be followed in the event of contractual work which requires isolation or depletion of supplies shall be included.

5.17 An indication of the scale of the medical equipment available. Where medical equipment is held other than on the RFF vehicles a statement indicating its location and how it is to be transported to an incident shall be included.

5.17.1 The Aerodrome Operator shall provide aeronautical data regarding Rescue and Firefighting in accordance with Chapter 2, 2.11.

5.18 Integrated Emergency Planning

5.18.1 The Aerodrome Operators arrangements for determining and implementing plans that ensure the integrated management of response to an aircraft incident/accident. These arrangements shall take account of the complexity and size of the aircraft operations.

5.18.2 Policy statement of distance Aerodrome would respond to an aircraft accident off aerodrome.

5.18.3 Additional information/instructions within the Emergency Plan shall be described based upon the hazard/risk registry undertaken by the Aerodrome Operator.

5.19 Disabled Aircraft Removal

5.19.1 The Aerodrome Operators arrangements and implementing plans that ensure the integrated management of aircraft recovery and business continuity following an aircraft incident/accident. These arrangements shall take account of the complexity and size of the aircraft operations and based on the largest aircraft using the aerodrome.

5.19.2 The full provision of Rescue, Fire-Fighting and Emergency Planning for all categories of aerodrome shall be in accordance with JCAR Part 139 paragraph 139.309 Aerodrome Emergency Plan.