**Proposed Amendments to the Civil Aviation (Aerodromes) Regulations, 2019;**

**Key**

**Red texted (Aircraft classification) Text to be inserted**

**Strikethrough text (~~intended for operations)~~ Text to be deleted**

**Green text Explanation or text to be relocated**

| **Regulation number**  | **Regulation Change**  | **Remarks**  |
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| **Regulation 2 *Interpretation*** | Aircraft classification number (ACN) means a number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. | Applicable until of 27 November 2024 |
| **Regulation 2 *Interpretation*** | Aircraft classification rating (ACR) means a number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. | New definition Applicable as of 28 November 2024 |
| **Regulation 2 *Interpretation*** | “instrument runway” means one of the following types of runways intended for the operation of aircraft using instrument approach procedures —...(d) “precision approach runway category III” means a runway served by visual aids and non-visual aids intended for landing operations following an instrument approach operation type B ~~to and along the surface of the runway and —~~~~A — intended for operations~~ with a decision height (DH) lower than 30 m (100 ft), or no decision height and a runway visual range ~~not~~ less than ~~175~~ 300 m or~~.~~~~B — intended for operations with a decision height (DH) lower than 15 m (50 ft), or no decision height and a runway visual range less than 175 m but not less than 50 m~~~~C — intended for operations with no decision height (DH) and~~ no runway visual range limitations.Note- Visual aids need not necessarily be matched to the scale of non-visual aids provided. The criterion for the selection of visual aids is the conditions in which operations are intended to be conducted; | Amend by inserting text and deleting text  |
| **Regulation 2 *Interpretation*** | “precision approach runway” means one of the following types ofrunways –……(c) “precision approach runway category III” – a runway served by visual aids and non-visual aids intended for landing operations following an instrument approach operation type B ~~to and along the surface of the runway and —~~~~A — intended for operations~~ with a decision height (DH) lower than 30 m (100 ft), or no decision height and a runway visual range ~~not~~ less than ~~175~~ 300 m or~~.~~~~B — intended for operations with a decision height (DH) lower than 15 m (50 ft), or no decision height and a runway visual range less than 175 m but not less than 50 m~~~~C — intended for operations with no decision height (DH) and~~ no runway visual range limitations.Note- Visual aids need not necessarily be matched to the scale of non-visual aids provided. The criterion for the selection of visual aids is the conditions in which operations are intended to be conducted; |  |
| **Regulation 2 *Interpretation*** | “Pavement classification number (PCN)” means a number expressing the bearing strength of a pavement ~~for unrestricted operations~~.  | Applicable until 27 November 2024.  |
| **Regulation 2 *Interpretation*** | “Pavement classification rating (PCR)” means a number expressing the bearing strength of a pavement. | Applicable as of 28 November 2024. |
| **Regulation 3 *Application*** | The specifications of Part IX of these Regulations, shall apply only to land aerodromes.The specifications in this regulation shall apply, where appropriate, to heliports but shall not apply to stolports. | Amend by inserting new sub regulations under Applicability ICAO Standard 1.2.2  |
| **Regulation 5 *Use of common reference systems.*** | (2) The Mean Sea Level datum ~~shall be used as the vertical reference system elevation at aerodromes~~ which gives the relationship of gravity-related height (elevation) to a surface known as the geoid, ~~and~~ shall be used as the vertical reference system at aerodromes.(5) The International System of Units developed and maintained by the General Conference ~~of~~ on Weights and Measures (CGPM) shall be used as the standard system of units of measurement unless otherwise prescribed by the Authority. | Amend by inserting text and deleting text Standard 1.3.2  |
| **Title for Part II** | Part II — Construction of Aerodromes ~~and Heliports~~ |  |
| **Regulation 9 *Design and construction of aerodrome.*** | **9. Design and construction of aerodrome.**(1) An applicant for a construction permit shall ensure that the design and construction of the aerodrome is undertaken by a person registered by the relevant professional body ~~and shall take into account land use and environmental control measures~~.(2) The authority shall inspect the site of an aerodrome during construction to ascertain compliance ~~with the standards prescribed~~ with these Regulations, the Civil Aviation (Security) Regulations, other applicable Laws and the terms of the aerodrome construction permit. | Amend by inserting text and deleting text  |
| **New Regulation under Part II - Construction of Aerodromes** **Insert after Regulation 9** | **Aerodrome master plan**1. This regulation shall be applicable from 3 November 2022.
2. A master plan containing detailed plans for the development of aerodrome infrastructure shall be established for Category A aerodromes, and other aerodromes as shall be determined by the Authority.
3. The master plan shall:
4. contain a schedule of priorities including a phased implementation plan; and
5. be reviewed periodically to take into account current and future aerodrome traffic.
6. Aerodrome stakeholders, particularly aircraft operators, may be consulted in order to facilitate the master planning process using a consultative and collaborative approach.
 | Applicable as of 3 November 2022 |
| **Regulation 10 *Requirements for aerodrome design.*** | **10. Requirements for aerodrome design.**(1) Architectural and infrastructure-related requirements for the optimum implementation of the Civil Aviation (Security) Regulations shall be integrated into the design and construction of new facilities and alterations to existing facilities at an aerodrome. ~~(1)~~ (2) The design of an aerodrome shall take into account, where appropriate, land use and environmental control measures. ~~(1)~~ (3) An aerodrome design shall —(a) indicate the physical characteristics in accordance with these Regulations;(b) indicate the obstacle limitation surfaces;(c) indicate visual aids for navigation ~~denoting obstacles and restricted areas~~; and(d) indicate the appropriate equipment and installations; ~~and~~~~(e) integrate security measures in accordance with the Civil~~~~Aviation (Security) Regulations, 2017.~~~~(2)~~ (4) The physical characteristics, obstacle limitation surfaces, visual aids and equipment and installations, required under sub-regulation (~~1~~3) shall -(a) be appropriate to the critical aircraft characteristics for which the aerodrome intends to serve;(b) be at the lowest meteorological minima for each runway;(c) provide ambient light conditions during the operations ofaircraft; and(d) comply with the appropriate aerodrome design ~~standards~~ requirements as prescribed by the Authority. | Amend by inserting text and deleting text  |
| **Regulation 11** ***Aerodrome reference code.*** | (4) The code number for element 1 shall be determined fromTable 1A, column 1 by selecting the code number corresponding to the highest value of the aeroplane reference field lengths of the aeroplane for which the runway intended. (5) The code letter for element 2 shall be determined from Table 1B ~~column 3~~, by selecting the code letter which corresponds to the greatest wingspan, ~~or the greatest outer main gear main wheelspan, whichever gives the more demanding code letter~~ of the aeroplanes for which the facility is intended.

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| **Table 1 B Code element 2** |
| Code element 2 |
| Code ~~number~~ letter | Wingspan |
| A | Up to but not including 15m |
| B | 15m up to but not including 24m |
| C | 24m up to but not including 36m |
| D | 36m up to but not including 52m |
| E | 52m up to but not including 65m |
| F | 65m up to but not including 80m |

 | Amend by inserting text and deleting text  |
| **Regulation 12 *Application of this Part.*** | **12. Application of this Part.**(1) This Part applies to aerodromes in categories B, and C ~~and D~~ except where otherwise specified by the Authority.(2) A person shall not operate an aerodrome in categories B, and C ~~and D~~ without a licence issued by the Authority. |  |
| **Regulation 13 *Application for licence.*** | **13. Application for licence.**(1) An application for an aerodrome licence for aerodromes incategory B, and C ~~and D~~ shall be made to the Authority on aerodrome Licence application form ~~in the prescribed form~~ and the application shall be accompanied by —(a) an aerodrome manual;(b) ~~a heliport Manual, for Category D;~~(c) a site plan for the aerodrome;(d) ~~an environmental impact assessment report;~~(e) proof of financial capability in the case of aerodromes inCategory B;(f) particulars of any non-compliance or deviations from theappropriate aerodrome design, operation or equipmentstandards;(g) charges as prescribed by the Authority in the AeronauticalInformation Publication or Aeronautical Information Circular;and(h) ~~an~~ approval from any relevant authority.(2) Aerodrome licence application forms are obtainable from the Authority and also in electronic format at www.caa.go.ug. | Amend by inserting text and deleting text  |
| **Regulation 14 *Conditions for issuance of licence.*** | (4) An aerodrome operator ~~may~~ shall not refuse an aircraft ~~to~~ ~~use an aerodrome except~~ in an emergency situation from using the aerodrome. |  |
| **Regulation 15 *Issuance of licence.*** | ~~(3) The issuance of an aerodrome licence to Aerodromes in Category D shall be subject to compliance with these Regulations and standards prescribed in Schedule 2, and any other condition as may be specified or notified by the Authority in accordance with safety audit and inspection.~~ | Amend by deleting text  |
| **Regulation 17 *Specifications of an Aerodrome licence.***  | ~~(3) A licence may be suspended or cancelled in accordance with regulations 22 and 23.~~ |  |
| **Regulation 19 *Renewal of licence.*** | (1) An application for the renewal of an aerodrome licence shall be made to the Authority on aerodrome Licence application form in the prescribed form and shall be accompanied by —(4) The Authority shall inspect the aerodrome and associated facilities for the purpose of ensuring compliance with applicable requirements before a license is renewed. | Amend by Inserting new sub regulation  |
| **Regulation 20 *Amendment of licence.*** | (2) The Authority may request that the application be accompanied by any or all of the following —(a) an aerodrome manual;(b) a site plan for the aerodrome;(c) an environmental impact assessment or environmental audit report;(d) approval from any relevant authority;(e) ~~proof of financial capability~~ a report of the safety assessment and change management process;(f) particulars of any non-compliance or deviations from theappropriate aerodrome design, operation or equipmentstandards; and(g) charges as prescribed in the Aeronautical InformationPublication or Aeronautical Information Circular by theAuthority. |  |
| **Regulation 22 *Suspension of a licence.*** | (5A) A holder of an aerodrome licence who is aggrieved by the suspension of a licence may appeal against the suspension to the Authority’s director general within forty eight hours. (5) A holder of an aerodrome licence who is aggrieved by the suspension of a licence may appeal against the suspension to the Appeals tribunal, within ~~thirty~~ fourteen days of the suspension.(7) Where a holder of an aerodrome licence does not appeal against the suspension in accordance with sub-regulation (5), a holder of the licence shall surrender the licence to the authority within thirty days. | Insert before 5  |
| **Regulation 23 *Cancellation of licence*** | (2A) A holder of an aerodrome licence who is aggrieved by the cancellation of a licence may appeal against the cancellation to the Authority’s director general within forty eight hours.(2) A holder of a licence who is aggrieved by the cancellation of a licence may appeal against the cancellation to the Appeals tribunal, within ~~thirty~~ fourteen days of the cancellation. | Amend by inserting text and deleting text  |
| **Regulation 26 *Licences register.*** | (2) The register shall contain the —(a) full name of the holder of an aerodrome licence;(b) nationality of the holder of a licence;(c) postal, telephone, facsimile and e-mail addresses of a holder of a licence;(d) name and location of the aerodrome for which a licence is issued;(e) number of the licence;(f) ~~date on which the licence was issued~~ the license issue and expiry date; and(g) any other relevant information. |  |
| **Regulation 29 *Application for certificate.*** | (1) An application for an aerodrome certificate shall be made to the Authority on aerodrome certificate application form ~~submitted in a form prescribed by the Authority~~ and shall be accompanied by —(a) two copies of the aerodrome manual;(b) a site plan for the aerodrome;(c) an environmental impact assessment report ~~issued~~ approved by National Environment Management Authority;(d) approval from any other relevant authority;(e) proof of financial capability;(f) particulars of any non-compliance or deviations from the appropriate aerodrome design, operation or equipment standards; and(g) charges as prescribed by the Authority in the AeronauticalInformation Publication or Aeronautical Information Circular;(h) details of competence of the key aerodrome personnel including resume, training records history and any other information that may be sought by the Authority to ascertain the competency of the person as prescribed by the Authority; and.(i) WGS84 aerodrome survey report and drawings~~; and~~~~(j) Aerodrome Data as specified in Part 3 of the Aerodrome Manual.~~ (2) Aerodrome certificate application forms are obtainable from the Authority and also in electronic format at www.caa.go.ug. |  |
| **Regulation 32 *Aerodrome certificate.*** | ~~(3) An aerodrome certificate may be suspended or cancelled in accordance with regulations 38 and 39.~~  |  |
| **Regulation 33 *Issuance of aerodrome certificate.*** | (1) The authority shall issue an aerodrome certificate, ~~in the prescribed form and manner~~ where the Authority is satisfied that — |  |
| **Regulation 36 *Amendment of aerodrome certificate.*** | **36. Amendment of aerodrome certificate.**(1) An application for amendment of an aerodrome certificate shall be submitted in a form prescribed by the Authority. |  |
| **Regulation 38 *Suspension and cancellation of certificate.*** | (5A) A holder of an aerodrome licence who who is aggrieved by the suspension of a licence may appeal against the suspension to the Authority’s director general within forty eight hours. (5) A holder of an aerodrome licence who is aggrieved by the suspension of a licence may appeal against the suspension to the Appeals tribunal, within thirty days of the suspension.(7) Where a holder of an aerodrome licence does not appeal against the suspension in accordance with sub-regulation (5), a holder of the licence shall surrender the licence to the authority within thirty days. | Amend accordingly  |
| **Regulation 39 *Cancellation of aerodrome certificate*** | Amend issues on Appeal  |  |
| **Regulation 32 *Aerodrome certificate.*** | **42. Certificates register.**(1) The Authority shall maintain a register of all aerodrome certificates issued in accordance with these Regulations.(2) The register shall contain —(a) the full name of the holder of the aerodrome certificate;(b) the nationality of the holder of the aerodrome certificate;(c) the postal, telephone, facsimile and e-mail addresses of aholder of the aerodrome certificate;(d) the name and location of the aerodrome for which an aerodromecertificate is issued;(e) the number of the aerodrome certificate;(f) the certificate issue and expiry date ~~the date on which the aerodrome certificate was issued~~; and(g) any other relevant information. |  |
|  | 15(3) and 63 to be revised to exclude requirements for heliports |  |
| **Regulation 43 *Compliance with conditions***  | **43. Compliance with regulations and conditions.**An aerodrome operator shall comply with these Regulations, conditions~~,~~ endorsed on an aerodrome certificate or licence granted under these Regulations and any other condition that may be set by the Authority. |  |
| **Regulation 44 *Competence of operational and maintenance personnel*** |  (3) An aerodrome operator shall establish and implement a training programme to upgrade the competency of the personnel referred to in sub regulation (1). (4) sub regulation (3) shall apply to aerodromes in Category A.  |  |
| **Regulation 45 *Aerodrome operations and maintenance*** | (5) The coordination mentioned in sub regulation (4) shall cover other areas related to safety such as aeronautical information service, air traffic services, designated meteorological authorities and security. |  |
| **Regulation 46 *Safety management system*** | (1) An operator of an aerodrome shall have a safety management system that complies with the requirements specified in the Civil Aviation (Safety Management) Regulations, ~~2019~~ 2020 and any other requirements as may be prescribed by the Authority.(2) (3) This regulation shall apply to aerodromes in categories C and D to the extent practicable. |  |
| **Regulation 46B**  | **Aerodrome operator’s internal safety audits and safety reporting** (1) The aerodrome operator shall arrange for an 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. (2) The aerodrome operator shall also arrange for an external audit and inspection programme for evaluating other users, including fixed-base operators, ground handling agencies and other organizations working at the aerodrome as referred to in regulation 46 (2). |  |
| **Regulation 47 *Storage of inflammable and other dangerous goods.*** | **47. Storage of inflammable and other dangerous goods.**A person shall not store fuel, pyrotechnic materials and other highly inflammable or dangerous goods at an aerodrome except with the permission of the Authority and in accordance with the applicable laws ~~prescribed standards~~. |  |
| **Regulation 48** ***Safety measures against fire.*** | (1) A person shall not —(a) smoke within any place or bring an open flame into any place, where that act is prohibited ~~by a displayed notice~~;(b) ~~where there is no notice prohibiting smoking in a place,~~ smoke ~~within that place~~ or ~~bring~~ cause any ~~open~~ flame ~~into that place~~, within the vicinity ~~a distance~~ of an aircraft or of any vehicle used for the supply of fuel to an aircraft or a store, dump, liquid fuel or explosives~~, as may be prescribed~~; (c) wilfully give a false fire alarm;(~~c~~d) tamper or interfere with any fire hose reel, hydrant or any other item of equipment provided for fire-fighting purposes;(~~d~~ e) keep, store, discard or discharge any flammable liquid, gas, signal flares or other like material in an aircraft, except in the receptacle appropriate for the purpose or in a place on theaerodrome specifically approved by the aerodrome operatorfor the purpose; or(~~e~~ f) store, stack or use any material or equipment in a manner which constitutes or is likely to constitute a fire hazard. | Amend by deleting and inserting text  |
| **Regulation 52 *Certain acts prohibited on an aerodrome*** | **52. Certain acts prohibited on an aerodrome**(1) A person shall not —(a) obstruct or interfere with the proper use of the ae rodrome;(b) obstruct any person executing his or her duties at the aerodrome;(c) remove or deface any notice, writing, document or markingerected or displayed by the aerodrome operator;(d) throw, leave or drop anything capable of causing injury to any person or damage to any property;(e) dump any waste matter except at a place approved for thepurpose by the aerodrome operator; or(f) dump or spill any substance capable of causing water pollution, whether solid, liquid, vapour or gas or a combination of these, except at a place approved for that purpose by the aerodrome operator at an aerodrome.(2) A person shall not, except with the permission of the operator —(a) interfere or tamper with any part of the aerodrome or anyequipment associated with the operation of the aerodrome;(b) climb any wall, fence, barrier, ceiling, gate or post on anaerodrome;(c) handle any baggage or carry baggage for a passenger at anaerodrome;(d) bring a vehicle into or drive into an aerodrome; or(e) obstruct an entrance to or a passage at an aerodrome in a manner that inconveniences other users of the entrance or passage. | Relocate Regulation to Part xviii – general provisions  |
| **Regulation 54 *Maintenance of environment management programme*** | (3)This regulation shall not apply to aerodromes in categories C and D. |  |
| **Regulation 56 *Responsibilities of the aerodrome operator*** | An aerodrome operator shall —(a) maintain the aerodrome in a serviceable condition;(b) keep the aerodrome free of unauthorized persons, vehicles and animals which are not under proper control or any other obstructions;(c) mark all obstructions in accordance with these regulations ~~the prescribed guidelines~~;(d) inform the Authority of any alterations to obstruction or works on the aerodrome;(e) install approved wind direction indicators to show the surface direction of the wind and ensure that they function satisfactorily; |  |
| **Regulation 63 *Information to be included in an aerodrome and heliport manual.*** | **63. Information to be included in an aerodrome and ~~heliport manual~~.**(1) An aerodrome ~~and heliport manual~~ shall contain all information and instructions necessary to enable the personnel of an aerodrome perform their duties.(2) Notwithstanding sub regulation (1), and to the extent that the particulars are applicable, a manual for an aerodrome in category A, B and C shall include all pertinent information on the aerodromes site, facilities, services, equipment, operating procedures, organization and management, including a safety management system as provided in Schedule 1 ~~and for an aerodrome in category D, the particulars provided in Schedule 3~~.(3) Where a person is given an exemption in accordance with Part XVIII, the aerodrome manual shall show the exemption notice number given for the exemption by the Authority, the date where the exemption came into effect and any conditions or procedures subject to which the exemption was granted. | In all applicable regulations, delete items relating to Heliport Manual  |
| **Regulation 64. *Amendment of an aerodrome manual.*** |  (1) For the purposes of maintaining the accuracy of the information in an aerodrome ~~and heliport manual~~ –(a) an aerodrome operator shall whenever necessary, amend theaerodrome manual; or(b) the Authority may issue a written directive requiring the operator to alter or amend the aerodrome manual.(2) Notwithstanding sub-regulation (1), an operator shall submit the proposed amendment to the Authority for approval, before the aerodrome manual is amended.(3) The Authority shall approve the amendment made to an aerodrome ~~and heliport manual~~ where the amendment meets the requirements of these Regulations. |  |
| **Regulation 65 *Aeronautical data.*** | **65. Aeronautical data.**(1) An aerodrome operator shall determine and report aerodrome related aeronautical data in accordance with the accuracy and integrity classification required to meet the needs of the end-users of aeronautical data. ~~requirements specified in Tables A5-1 to A5-5 prescribed in Schedule 9, while taking into account the established quality system procedures.~~~~(2) The accuracy requirements for aeronautical data shall be based upon a 95 per cent confidence level and in that respect, three types of positional data shall be identified—~~~~(a) surveyed points such as the runway threshold;~~~~(b) calculated points that is, mathematical calculations from~~~~the known surveyed points of points in space, fixes; and~~~~(c) declared points such as flight information region boundary points.~~ (4) The selection of the aerodrome mapping data features to be collected shall be made with consideration of the intended applications which are made available in accordance with sub-regulation (~~3~~2).~~(5) Aerodrome mapping data shall comply with the accuracy and integrity requirements specified in Schedule 9 where made available in accordance with sub-regulation (3).~~(5) Digital data error detection techniques shall be used during the transmission and storage of aeronautical data and digital data sets.~~(6) Integrity of aeronautical data shall be maintained throughout~~~~the data process from survey or origin to the next intended user and based on the applicable integrity classification, the validation and verification procedures shall-~~~~(a) for routine data- avoid corruption throughout the processing~~~~of the data;~~~~(b) for essential data- assure corruption does not occur at any~~~~stage of the entire process and may include additional~~~~processes as needed to address potential risks in the overall~~~~system architecture to further assure data integrity at this~~~~level; and~~~~(c) for critical data- assure corruption does not occur at any~~~~stage of the entire process and include additional integrity~~~~assurance procedures to fully mitigate the effects of faults~~~~identified by thorough analysis of the overall system~~~~architecture as potential data integrity risks.~~~~(7) Protection of electronic aeronautical data while stored or~~~~in transit shall be monitored by the cyclic redundancy check (CRC) and to achieve protection of the integrity level of critical and essential aeronautical data as classified in sub-regulation (6), a 32- or 24-bit CRC algorithm shall apply, respectively.~~~~(8) To achieve protection of the integrity level of routine~~~~aeronautical data as classified in sub-regulation (6), a 16-bit CRC algorithm shall apply.~~~~(9) Geographical coordinates indicating latitude and longitude~~~~shall be determined and reported to the Aeronautical Information Services in terms of the World Geodetic System — 1984 (WGS-84) geodetic reference datum, identifying those geographical coordinates which have been transformed into WGS-84 coordinates by mathematical means and whose accuracy of original field work does not meet the requirements in~~~~Table A5-1 of Schedule 9.~~~~(10) The order of accuracy of the field work shall be such that the resulting operational navigation data for the phases of flight will be within the maximum deviations, with respect to an appropriate reference frame, as indicated in the tables contained in Schedule 9 and an appropriate reference frame is that which enables WGS-84 to be realized on a given aerodrome and with respect to which all coordinate data are related.~~~~(11) In addition to the elevation, referenced to mean sea level, of~~~~the specific surveyed ground positions at aerodromes, geoid undulation, referenced to the WGS-84 ellipsoid, for those positions as indicated in Schedule 9 shall be determined and reported to the Aeronautical Information Services.~~ | Delete sub regulation (2) and renumber and update cross reference  |
| **Regulation 69 *Aerodrome dimensions and related information.*** | (1) (c) arresting system-location, for which runway end and description; |  |
| **Regulation 70 *Strength of pavements.*** |

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| (6) Information on pavement type for ACN-PCN determination, subgrade strength category, maximum allowable tire pressure category and evaluation method shall be reported using the following codes—

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| --- | --- | --- |
|  |  *Pavement type for ACN-PCN determination:* | *Code* |
|  | Rigid pavement | R |
|  | Flexible pavement | F |
|  | *Subgrade strength category:* | *Code*  |
|  | *High strength:* characterized by K = 150 MN/m3 and representing all K values above 120 MN/m3 for rigid pavements, and by CBR = 15 and representing all CBR values above 13 for flexible pavements.  | *A* |
|  | *Medium strength:* characterized by K = 80 MN/m3 and representing a range in K of 60 to120 MN/m3 for rigid pavements, and by CBR = 10 and representing a range in CBR of 8 to 13 for flexible pavements.  | *B* |
|  | *Low strength:* characterized by K = 40 MN/m3 and representing a range in K of 25 to60 MN/m3 for rigid pavements, and by CBR = 6 and representing a range in CBR of 4 to 8 for flexible pavements.  | *C* |
|  | *Ultra low strength:* characterized by K = 20 MN/m3 and representing all K values below 25 MN/m3 for rigid pavements, and by CBR = 3 and representing all CBR values below 4 for flexible pavements. | *D* |
|  | *Maximum allowable tire pressure category:* | *Code*  |
|  | *Unlimited:* no pressure limit | *W* |
|  | *High:* pressure limited to 1.75 MPa | *X* |
|  | *Medium:* pressure limited to 1.25 MPa | *Y* |
|  | *Low:* pressure limited to 0.50 MPa | *Z* |
|  | *Evaluation method:* | *Code* |
|  | *Technical evaluation:* representing a specific study of the pavement characteristics and application of pavement behaviour technology. | T |
|  | *Using aircraft experience:* representing a knowledge of the specific type and mass of aircraft satisfactorily being supported under regular use. | U |

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 | Current Regulation 70 applicable until 27 November 2024 |
| **New Regulation 70 A** | (1) The bearing strength of a pavement shall be determined. (2) The bearing strength of a pavement intended for aircraft of apron mass greater than 5,700 kg shall be made available using the Aircraft Classification Rating - Pavement Classification Rating (ACR- PCR) method by reporting all of the following information—(a) the Pavement Classification Rating (PCR) and numerical value;(b) pavement type for ACR-PCR determination;(c) subgrade strength category;(d) maximum allowable tire pressure category or maximum allowable tire pressure value; and(e) evaluation method.(3) The Pavement Classification Rating (PCR) reported shall indicate that an aircraft with an Aircraft Classification Rating (ACR) equal to or less than the reported PCR can operate on the pavement subject to any limitation on the tire pressure, or aircraft all-up mass for specified aircraft type.(4) The ACR of an aircraft shall be determined in accordance with the standard procedures associated with the ACR-PCR method.(5) For the purposes of determining the ACR, the behaviour of a pavement shall be classified as equivalent to a rigid or flexible construction.(6) Information on pavement type for ACR-PCR determination, subgrade strength category, maximum allowable tire pressure category and evaluation method shall be reported using the following codes—

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| --- | --- | --- |
|  | *Pavement type for ACR-PCR determination:*Rigid pavement Flexible pavement  | *Code*RF |
|  | *Subgrade strength category:* | *Code* |
|  | *High strength:* characterized by E=200 MPa, and representing all E values equal to or above 150 MPa for rigid and flexible pavements. | A |
|  | *Medium strength:* characterized by E=120 MPa and representing a range in E values equal to or above 100 MPa and strictly less than 150 MPa, for rigid and flexible pavements | B |
|  | *Low strength:* characterized by E=80 MPa and representing a range in E values equal to or above 60 MPa and strictly less than 100 MPa, for rigid and flexible pavements. | C |
|  | *Ultra-low strength:* characterized by E=50 MPa and representing all E values strictly less than 60 MPa, for rigid and flexible pavements. | D |
|  | *Maximum allowable tire pressure category:* | *Code* |
|  | *Unlimited:* no pressure limit | W |
|  | *High:* pressure limited to 1.75 MPa | X |
|  | *Medium:* pressure limited to 1.25 MPa | Y |
|  | *Low:* pressure limited to 0.50 MPa | Z |
|  | *Evaluation method:* | *Code* |
|  | *Technical evaluation:* representing a specific study of the pavement characteristics and the types of aircraft which the pavement is intended to serve. | T |
|  | *Using aircraft experience:* representing a knowledge of the specific type and mass of aircraft satisfactorily being supported under regular use. | U |

(7) The following examples shall be used to illustrate howpavement strength data are reported under the ACR-PCR method; 1. If the bearing strength of a rigid pavement, resting on a medium strength subgrade, has been assessed by technical evaluation to be PCR 760 and there is no tire pressure limitation, then the reported information would be:

 PCR 760/ R / B / W / T1. If the bearing strength of a composite pavement, behaving like a flexible pavement and resting on a high strength subgrade, has been assessed by using aircraft experience to be PCR 550 and the maximum tire pressure allowable is 1.25 MPa, then the reported information would be:

 PCR 550 / F / A / Y / U(8) The Criteria in sub-regulation (10) shall be used to regulate the use of a pavement by an aircraft with an ACR higher than the PCR reported for that pavement in accordance with sub-regulations (2) and (3).(9) The bearing strength of a pavement intended for aircraft ofApron mass equal to or less than 5 700 kg shall be made available by reporting the following information—(a) maximum allowable aircraft mass; and(b) maximum allowable tire pressure.(10) For those operations in which magnitude of overload or the frequency of use do not justify a detailed analysis, the following criteria shall be used—(a) for flexible and rigid pavements, occasional movements by aircraft with ACR not exceeding 10 per cent above the reported PCR shall not adversely affect the pavement;(b) the annual number of overload movements shall not exceed approximately 5 per cent of the total annual movements, excluding light aircraft.(11) Overload movements shall not normally be permitted on pavements exhibiting signs of distress or failure.(12) Overloading shall be avoided when the strength of the pavement or its subgrade could be weakened by water.(13) The aerodrome operator shall review the relevant pavement condition regularly and shall review the criteria for overload operations periodically where overload operations are conducted. | Effective 28 November 2024  |
| **Regulation 73. *Condition of the movement area and related facilities.*** |  (1) Information on the condition of the movement area and the operational status of related facilities shall be provided to the appropriate aeronautical information services units, and similar information of operational significance to the air traffic services units, to enable those units to provide the necessary information to arriving and departing aircraft and the information shall be kept up to date and changes in conditions reported without delay.(3) To facilitate compliance with sub-regulations (1) and (2),~~(a) inspections of the movement area shall be carried out each day at least once where the code number is 1 or 2 and at least twice where the code number is 3 or 4; and~~~~(b) for runway inspections whenever the runway surface may have changed significantly due to meteorological conditions.~~the following inspections shall be carried out each day:a) for the movement area, at least once where the aerodrome reference code number is 1 or 2 and at least twice wherethe aerodrome reference code number is 3 or 4; andb) for the runway(s), inspections in addition to a) whenever the runway surface conditions may have changed significantly due to meteorological conditions.(4) Personnel assessing and reporting runway surface conditions required in sub-regulation (2) shall be trained and competent to perform their duties. |  |
| **Regulation 74 *Water on a runway.*** | **~~Water on a runway.~~**~~(1) Whenever water is present on a runway, a description of the~~~~runway surface conditions shall be made available using the following terms—~~~~DAMP - the surface shows a change of colour due to moisture.~~~~WET - the surface is soaked but there is no standing water.~~~~STANDING WATER - for aeroplane performance purposes, a runway where more than 25 per cent of the runway surface area, whether in isolated areas or not, within the required length and width being used is covered by water more than 3 mm deep.”~~~~(2) Information that a runway or a portion of the runway may be slippery when wet shall be made available.~~~~(3) Notification shall be given to aerodrome users when the friction level of a paved runway or portion of the runway is less than that specified in accordance with Table 19 in regulation 273 (3).~~~~(4) Conducting of a runway surface friction characteristics evaluation programme including determining and expressing the minimum friction level shall be in accordance with guidelines specified in Schedule 11.~~**Runway surface condition(s) for use in the runway condition report** 1. The runway surface condition shall be assessed and reported through a runway condition code (RWYCC) and a description using the following terms:

DRYSLUSHSTANDING WATERWETCHEMICALLY TREATEDLOOSE SAND1. Whenever an operational runway is contaminated, an assessment of the contaminant depth and coverage over each third of the runway shall be made and reported.
2. Information that a runway or portion thereof is slippery wet shall be made available.
3. Notification shall be given to relevant aerodrome users when the friction level of a paved runway or portion thereof is less than the minimum friction level specified in accordance with Table 19 regulation 273 (3).
4. Information to be promulgated in a NOTAM shall include specifying which portion of the runway is below the minimum friction level and its location on the runway.
 | From Previous amendment, Applicable November 2021 |
| **Regulation 76 *Information on level of protection of rescue and fire-fighting.*** | (3) Changes in the level of protection normally available at anaerodrome for rescue and fire-fighting services, caused by changes in the availability of extinguishing agents, equipment to deliver the agents or personnel to operate the equipment, among others, shall be notified to the appropriate air traffic services units and aeronautical information services units to enable those units to provide the necessary information to arriving and departing aircraft in the form of stating the revised RFF category. |  |
| **Regulation 78 *Coordination between aeronautical information services and aerodrome authorities.*** | **78. Coordination between aeronautical information services and aerodrome authorities.**(4) Changes to aeronautical information that affects charts and computer-based navigation systems which qualify to be notified by the Aeronautical Information Regulation and Control system are of particular importance.~~(5)~~ The predetermined, internationally agreed AeronauticalInformation Regulation and Control effective dates ~~in addition to 14 days postage time~~ shall be observed by the responsible aerodrome services when submitting the raw information or data to aeronautical information services.(6) The aerodrome services responsible for the provision of raw aeronautical information or data to the Aeronautical Information Services shall take into account accuracy and integrity requirements required to meet the needs of the end user of aeronautical data ~~for aeronautical data as specified in Schedule 9~~. |  |
| **Regulation 82 *National Committee on Wildlife Hazard Management*** | **National Committee on Wildlife Hazard Management.**~~There is established~~ the director general may establish a national committee on wildlife hazard management.  |  |
| **Regulation 83 *Responsibilities of the National Committee on Wildlife Hazard Management.*** | Where established, the national committee on wildlife hazard management shall be responsible for – |  |
| **Regulation 84. *Composition of the National Committee on Wildlife Hazard Management.*** | Where established, the national committee on wildlife hazard management shall consist of —(a) the director general of the Authority who shall be the chair |  |
| **Regulation 93 *Determination of width of runway.*** |

|  |  |
| --- | --- |
|  | Outer Main Gear Wheel Span (OMGWS) |
|  |  |  |  |  |
| Code number | Up to but not including 4.5 | 4.5 m up to but not including 6 m | 6 m up to but not including 9 m | 9 m up to but not including 15 m |
| 1a | 18 m | 18 m | 23 m | - |
| 2~~a~~b | 23 m | 23 m | 30 m | - |
| 3 | 30 m | 30 m | 30 m | 45 m |
| 4 | - | - | 45 m | 45 m |

a ~~if the turn pad is intended to be used by aeroplanes with wheel base less than 18m a.~~ The width of a precision approach runway should be not less than 30 m where the code number is 1 or 2.~~b~~~~if the turn pad is intended to be used by aeroplanes with a wheel base equal to or greater than 18m~~ |  |
| **Regulation 97 *Surface of runways*** | (2) A paved runway shall be constructed or resurfaced to provide surface friction characteristics at or above the minimum friction level specified in Regulation 273 (3) ~~by the Authority~~. |  |
| **Regulation 98 *Runway shoulders*** | (1) Runway shoulders shall be provided for a runway where the code letter is D, E or F.(2) For aeroplanes with OMGWS from 9 m up to but not including 15 m,~~T~~the runway shoulders shall extend symmetrically on each side of the runway so that the overall width of the runway and its shoulders is not less than —(a) 60 m where the code letter is D or E ~~for aeroplanes with~~~~Outer Main Gear Wheel Span (OMGWS) from 9 m up to~~~~but not including 15m~~;(b) 60 m where the code letter is F for two- or three-enginedaeroplanes ~~with Outer Main Gear Wheel Span from 9 m up to~~~~but not including 15 m~~; and(c) 75 m where the code letter is F for four (or more)-enginedaeroplanes ~~with Outer Main Gear Wheel Span from 9 m up to but not including 15 m~~. |  |
| **Regulation 100 *Runway strips*** | (4) A strip including a non-instrument runway shall extend on each side of the centreline of the runway and its extended centreline throughout the length of the strip, to a distance of at least –~~(a) 140 m where the code number is 3 or 4; and~~~~(b) 70 m where the code number is 1 or 2.~~ (a) 75 m where the code number is 3 or 4; (b) 40 m where the code number is 2; and (c) 30 m where the code number is 1.(5) An object situated on a runway strip which may endanger aircraft shall be regarded as an obstacle and shall, as far as practicable, be removed and.1. consideration shall be given to the location and design of drains on a runway strip to prevent damage to an aeroplane accidentally running off a runway;
2. where open-air or covered storm water conveyances are installed, consideration shall have to be given to ensure that their structure does not extend above the surrounding ground so as not to be considered an obstacle;
3. particular attention needs to be given to the design and maintenance of an open-air storm water conveyance in order to prevent wildlife attraction, notably birds. Where needed, it can be covered by a net.

(6) A fixed object, other than visual aids required for air navigation or those required for aircraft safety purposes and which must be sited on the runway strip, and satisfying the relevant frangibility requirements in Part XI, shall not be permitted on any part of a runway strip of a precision approach runway delineated by the lower edges of the inner transitional surfaces. ~~(a) within 77.5 m of the runway centreline of a precision approach runway category I, II or III where the code number is 4 and the code letter is F; or~~~~(b) within 60 m of the runway centreline of a precision approach runway category I, II or III where the code number is 3 or 4; or~~~~(c) within 45 m of the runway centreline of a precision approach runway category I where the code number is 1 or 2.~~(7) A mobile object shall not be permitted on ~~this~~ the part of the runway strip in sub regulation (6) during the use of the runway for landing or take-off. (8) That portion of a strip of an instrument runway within a distance of at least —(a) ~~105~~ 75 m where the code number is 3 or 4; and(b) 40 m where the code number is 1 or 2;from the centreline of the runway and its extended centreline shall provide a graded area for aeroplanes which the runway is intended to serve in the event of an aircraft running off the runway. | (4) amended to annex provision 3.4.5  |
| **Regulation 102 *Runway end safety area*** | (3) A runway end safety area shall~~, as far as practicable,~~ extend from the end of a runway strip to a distance of at least 90m where—~~(a) 240 m where the code number is 3 or 4;~~~~(b) 120 m where the code number is 1 or 2 and the runway is an instrument one; and~~~~(c) 30m where the code number is 1 or 2 and the runway is a non-instrument one.~~ 1. the code number is 3 or 4; and

(b) the code number is 1 or 2 and the runway is an instrument one.(4) If an arresting system is installed, the above length in sub regulation (3) ~~(a) and (b)~~ may be reduced, based on the design specification of the system, subject to acceptance by the Authority. | *Amend by inserting new text* |
| **Regulation 103 *Clearways*** | (3) A clearway shall extend laterally on each side of the extended centre line of the runway to a distance of at least; (a) 75 m for instrument runways; and (b) half of the width of the runway strip for non-instrument runways. | *Amend by inserting new text*  |
| **Regulation 106 *Taxiways*** | (3) The design of a taxiway shall be such that, when the cockpit of the aeroplane for which the taxiway is intended remains over the taxiway centreline markings, the clearance distance between the outer main wheel of the aeroplane and the edge of the taxiway shall be not less than that given by the following tabulation:

|  |  |
| --- | --- |
|  | OMGWS |
|  |  |  |  |  |
|  | Up to but not including 4.5m | 4.5 m up to but not including 6m | 6 m up to but not including 9 m | 9 m up to but not including 15 m |
| Clearance | 1.50 m | 2.25 m | 3 ma,b or 4mc | 4 m |

a On straight portions. b On curved portions where the taxiway is intended to be used by aeroplanes with a wheelbase of less than 18 m. c On curved portions where the taxiway is intended to be used by aeroplanes with a wheel base equal to or greater than 18 m |  |
| **Regulation 110 *Taxiway strips*** | (8) The centre portion of a taxiway strip shall provide a graded area to a distance from the centreline of the taxiway of not less than that given by the following —(a) 10.25 m where the Outer Main Gear Wheel Span is up to but not including 4.5 m;(b) 11 m where the Outer Main Gear Wheel Span is 4.5m up to but not including 6 m;(c) 12.50 m where the Outer Main Gear Wheel Span is 6 m up to but not including 9 m; ~~and~~(d) 18.50 m where the Outer Main Gear Wheel Span is 9 m up to but not including 15 m.(e) 18.50 m where the OMGWS is 9 m up to but not including 15 m, where the code letter is D;(f) 19 m where the OMGWS is 9 m up to but not including 15 m, where the code letter is E; and (g) 22 m where the OMGWS is 9 m up to but not including 15 m, where the code letter is F. (9) The surface of the strip shall be flush~~ed~~ at the edge of the taxiway or shoulder, if provided, and the graded portion shall not have an upward transverse slope exceeding— |  |
| **Regulation 111 *Holding bays, runway holding positions, intermediate holding positions*** ***and road holding positions*** | (6) The distance between a holding bay, runway-holding position established at a taxiway and runway intersection or road-holding position and the centreline of a runway shall be in accordance with Table 3 and, in the case of a precision approach runway, such that a holding aircraft or vehicle will not interfere with the operation of radio navigation aids or penetrate the inner transitional surface.(8) If a holding bay, runway-holding position or road-holding position for a precision approach runway code number 4 is at a greater elevation compared to the threshold, the distance ~~of 90 m or 107.5 m, as appropriate,~~ specified in Table 3 shall be further increased 5 m for every metre the bay or position is higher than the threshold.**Table 3. Minimum distance from the runway centre line to a holding bay, runway-holding position or road-holding position**

|  |  |
| --- | --- |
| Type of Runway | Code Number |
| 1 | 2 | 3 | 4 |
| Non-instrument | 30 m | 40 m | 75 m | 75 m |
| Non-precision approach | 40 m | 40 m | 75 m | 75 m |
| Precision approach category I | 60 mb | 60mb | 90 ma,b | 90 ma,b |
| Precision approach category II and III | - | - | 90 ma,b | 90 ma,b |
| Take-off runway | 30 m | 40 m | 75 m | 75 m |
| (a) If a holding bay, runway-holding position or road-holding position is at a lower elevation compared to the threshold, the distance of 90 m in columns 3 and 4 may be decreased 5 m for every metre the bay or holding position is lower than the threshold, contingent upon not infringing the inner transitional surface.(b) The distance of 60 m and 90 m in columns 1, 2, 3 and 4 may need to be increased to avoid interference with radio navigation aids, particularly the glide path and localizer facilities. ~~(c) Where the code letter is F, the distance of 90 m in column 4 shall be 107.5 m.~~ |

 | *Amend by inserting new text and deleting text*  |
| **Regulation 114 *Erection of obstacles*** | (3) The aerodrome operator shall work with the authority, to review ~~the~~ any request for development in the vicinity of an aerodrome, where the object may cause an increase in an obstacle clearance altitude or in the height for an instrument approach procedure or of any associated visual circling procedure. |  |
| **Insert penalty of ushs 15,000,000/= for contravention of this regulation, as sub regulation (6)**   | *The current penalty in regulation 295 is not deterring for developers.* |
| **Regulation 115 *Establishment of obstacle limitation surfaces.*** | **115. Establishment of obstacle limitation surfaces.**(1) An aerodrome operator shall establish the obstacle limitation surfaces for the aerodrome in accordance with ~~the standards prescribed by~~ these Regulations. |  |
| **Regulation 116 *Obstacle limitation surfaces*** | The obstacle limitation surfaces shall comprise the following surfaces ~~described in paragraphs (a) to (g) and~~ as shown in the Figures 1 and 2 below —(a) outer horizontal surface(b) conical surface;(c) inner horizontal surface;(d) approach surface;(e) inner approach surface;(f) transitional surface;(g) inner transitional surface;(h) balked landing surface; and(i) take-off climb surface. |  |
| **Regulation 118 *Conical surface*** |  (1) The conical surface is a surface sloping upwards and outwards from the periphery of the inner horizontal surface.(2) The limits of the conical surface shall comprise—(a) a lower edge coincident with the periphery of the innerhorizontal surface; and(b) an upper edge located at a specified height, as indicated in table 4, above the inner horizontal surface.(3) The slope of the conical surface shall be measured in a vertical plane perpendicular to the periphery of the inner horizontal surface. (4) The slope of the conical surface measured in the vertical plane above the horizontal is 5% (1:20). |  |
| **Regulation 120 *Approach surface*** | (2) The limits of the approach surface shall comprise—(a) an inner edge of specified length, horizontal and perpendicular to the extended centreline of the runway and located at a ~~specified~~ distance of 60m before the threshold, except in the case of non-instrument runways where the code number is 1 and where the distance is 30 m;(b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate , as indicated in table 4, from the extended centreline of the runway;(4) The slope of the approach surface shall be measured in the vertical plane containing the centreline of the runway and shall continue containing the centreline of any lateral offset or curved ground track.(5) The dimensions and slope of the approach surface are specified in table 4. |  |
| **Regulation 121 *Inner approach surface*** |  (2) The limits of the inner approach surface shall comprise—(a) an inner edge coincident with the location of the inner edge of the approach surface but of its own specified length as indicated in table 4; |  |
| **Regulation 124. *Balked landing surface.*** | (2) The limits of the balked landing surface shall comprise —(a) an inner edge horizontal and perpendicular to the centrelineof the runway and location at a specified distance, as indicated in table 4, after the threshold;(b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate, as indicated in table 4, from the vertical plane containing the centreline of the runway; and(c) an outer edge parallel to the inner edge and located in the plane of the inner horizontal surface.(4) The slope of the balked landing surface, as indicated in table 4, shall be measured in the vertical plane containing the centreline of the runway. |  |
| **Regulation 125 *Take-off climb surface*** | (1) The take-off climb surface is an inclined plane or other specified surface beyond the end of a runway or clearway, where one is provided.(2) The limits of the take-off climb surface shall comprise—(a) an inner edge horizontal and perpendicular to the centreline of the runway and located either at a specified distance beyondthe end of the runway or at the end of the clearway when suchis provided and its length exceeds the specified distance in Regulation 129 table 5;(b) two sides originating at the ends of the inner edge, diverginguniformly at a specified rate from the take-off track to aspecified final width and continuing thereafter at that widthfor the remainder of the length of the take-off climb surface;and(c) an outer edge horizontal and perpendicular to the specified take-off track.(6) The dimensions of the take-off climb surface are specified in regulation 129 , table 5 |  |
| **Regulation 126 *Obstacle limitation requirements for non-instrument runways*** | (2) The following obstacle limitation surfaces shall be established for a non- instrument runway—(a) conical surface~~, outer horizontal surface, aerodrome reference codes 3 and 4~~;(b) inner horizontal surface;(c) approach surface; and(d) transitional surfaces(e) outer horizontal surface, where the aerodrome reference codes 3 and 4. | Edit and renumber  |
| **Regulation 128 *obstacle limitation requirements for precision approach runways*** |  (1) The following obstacle limitation surfaces shall be established fora precision approach runway category I —(a) conical surface ~~and horizontal surface~~;(b) inner horizontal surface;(c) approach surface;(d) transitional surfaces.(e) inner approach surface;(f) inner transitional surfaces; and(g) balked landing surface. |  |
| **Regulation 129 *Obstacle limitation requirements for runways meant for take-off*** |  RUNWAYS MEANT FOR TAKE-OFF

|  |  |
| --- | --- |
| Surface and dimensions a | Code number |
| 1 | 2 | 3 or 4 |
| (1) | (2) | (3) | (4) |
| TAKE-OFF CLIMB |  |  |  |
| Length of inner edge | 60 m | 80 m | 180 m |
| Distance from runway end b | 30 m | 60 m | 60 m |
| Divergence (each side) | 10 % | 10% | 12.5% |
| Final width | 380 m | 580 m | 1 200 m1800 mc |
| Length | 1 600 m | 2 500 m | 15 000 m |
| Slope | 5% | 4% | 2% d |
| a. All dimensions are measured horizontally unless specified otherwise. |
| b. The take-off climb surface starts at the end of the clearway where the clearway length exceeds the specified distance. |
| c. 1 800 m when intended track includes changes of heading greater than 15° for operations conducted in IMC, VMC by night. |
| d. See Regulations 129 (3) and 129 (7) of this Regulation. |

  |  |
| **Regulation 135 *Signalling lamp.*** | (2) The signalling lamp shall be capable of producing red, green and white signals and of being aimed manually at any target as required, giving a signal in any one colour followed by a signal in either of the other two colours and transmitting a message in anyone of the three colours by Morse Code up to a speed of at least four words per minute. ~~w~~When selecting the green light, the operator shall monitor the restricted boundary of green | *Amend by inserting the word “other”* |
| **Regulation 136 *Signal panel and signalling area*** |  (1) The Authority may where it considers it necessary, require a signal~~ling~~ panel and a signal~~ling~~ area to be provided at an aerodrome for safe operation of aircraft.(3) The signal~~ling~~ area shall be an even horizontal surface at least 9m square |  |
| **Regulation 137. *Markings.*** |  (1) An operator shall provide markings for paved runwaycentreline, paved runway edge, paved runway threshold, paved runway touchdown zone, paved runway holding position, aiming point, paved runway side stripe, paved runway turn pad, taxiways, aprons and intermediate holding positions at an aerodrome, in accordance with these Regulations . |  |
| **Regulation 140 *Runway centreline marking*** | ~~(4) The stripes of the threshold marking shall commence 6 m from the threshold as shown in the Figure 6~~ | *Delete* |
| **Regulation 141 *Threshold marking*** | (6) The number of stripes shall be in accordance with the runway width as follows—

|  |  |
| --- | --- |
| **Runway width**  | **Number of stripes** |
| 18 m  | 4 |
| 23 m  | 6 |
| 30 m  | 8 |
| 45 m  | 12 |
| 60 m  | 16 |

~~(7)~~ ~~E~~except that on non-precision approach and non-instrument runways 45 m or greater in width, they may be as shown in Figure 4 (C).(8) The stripes ~~required by sub-regulations (4) and (5)~~ shall extend laterally to within 3 m of the edge of a runway or to a distance of 27 m on either side of a runway centreline, whichever results in the smaller lateral distance. | *Delete sub regulation number and renumber*  |
| **Regulation 142 *Aiming point marking*** | (6) Where ~~an aiming point~~ a touchdown zone marking is provided, the lateral spacing between the markings shall be the same as that of the touchdown zone marking.**Table 5-1. Location and dimensions of aiming point marking**

|  |
| --- |
| Landing distance available |
| Location and dimensions | Less than 800m | 800m up to but not including 1200m | 1200m up to but not including 2400m | 2400m and above |
| (1) | (2) | (3) | (4) | (5) |
| Distance from threshold to beginning of marking | 150 m | 250m | 300 m | 400 m |
| Length of stripea | 30–45 m | 30–45 m | 45–60 m | 45–60 m |
| Width of stripe | 4 m | 6m | 6–10 mb | 6–10 mb |
| Lateral spacing between inner sides of stripes | 6mc | 9mc | 18–22.5 m | 18–22.5 m |
| ~~(a)~~ a The greater dimensions of the specified ranges are intended to be used where increased conspicuity is required.~~(a)~~ b The lateral spacing may be varied within these limits to minimize the contamination of the marking by rubber deposits.~~(a)~~ c These figures were deduced by reference to the outer main gear wheel span which is element 2 of the aerodrome reference code, in Tables 1A and 1B. |

***Table 6. Location and dimensions of aiming point marking*** |  |
| **Regulation 143 *Touchdown zone marking*** | (4) Where the marking is to be displayed at both the approachdirections of a runway, the distance between the thresholds, shall be as follows —

|  |  |
| --- | --- |
| **Landing distance available or the distance between thresholds** | **Pair of markings** |
| Less than ~~5~~900 m  | 1 |
| ~~5~~900m up to but not including 1 200 m  | 2 |
| 1 200m up to but not including 1 500 m  | 3 |
| 1 500m up to but not including 2 400 m  | 4 |
| 2 400m or more  | 6 |

 |  |
| **Regulation 145 *Taxiway centreline marking.*** | **145. Taxiway centreline marking.**(1) Taxiway centreline marking shall be provided on a paved taxiway and apron ~~where the code number is 3 or 4~~ in such a way as to provide continuous guidance between the runway centreline and aircraft stands.~~(2) Taxiway centreline marking shall be provided on a paved taxiway and apron where the code number is 1 or 2 in such a way as to provide continuous guidance between the runway centreline and aircraft stands.~~ |  |
| **Regulation 146 *Runway turn pad marking.***  | (9) The design of the turn pad marking shall be such that when the cockpit of the aeroplane remains over the runway turn pad marking, ~~its~~ the clearance distance between any wheel of the aeroplane landing gear and the edge of the runway shall not be less than specified in regulation 99 (5). | *Amend by deleting and inserting text.*  |
| **Regulation 147 *Runway-holding position marking.*** | 147(2) Figure 8 refers to figure 5-8 that is inexistent in the regulations. The figure is actually in the annex. ~~(6) Where increased conspicuity of the runway-holding position is required, the runway-holding position marking shall be done as appropriate.~~ (9) The runway-holding position marking displayed at a runway/ ~~or~~ runway intersection shall be perpendicular to the centreline of the runway forming part of the standard taxi-route. | *Replace figure 8 with the corrected figure below*  |
| **Regulation 148 *Intermediate holding position marking*** | **148. Intermediate holding position marking.**(1) An intermediate holding position marking shall bedisplayed along an intermediate holding position ~~consist of a single broken line as shown in Figure 8~~.(3) An intermediate holding position marking shall consist of a single broken line as shown in Figure 8. |  |
| **Regulation 149 *VOR aerodrome checkpoint marking*** | **149. VOR aerodrome checkpoint marking.**(1) An operator shall ensure that when a VOR aerodrome checkpoint is established, it shall be indicated by a VOR aerodrome checkpoint marking and sign~~ed~~.(3) It shall consist of a circle of 6 m in diameter and shall have a line width of 15 cm as shown figure 11A. |  |
| **Regulation 153. *Mandatory instruction marking.*** |  ~~(1) An aerodrome operator shall provide a mandatory instruction marking and a sign to identify a location beyond which a taxiing aircraft or vehicle shall not proceed, unless authorized by the aerodrome control tower.~~~~(2) Where it is impracticable to install a mandatory instruction marking and a sign in accordance with sub-regulation (1), a mandatory instruction marking or sign shall be provided on the surface of the pavement.~~(3) Where it is impracticable to install a mandatory instruction sign in accordance with regulation 202 (1), a mandatory instruction marking shall be provided on the surface of the pavement to identify a location beyond which a taxiing aircraft or vehicle shall not proceed unless authorized by the aerodrome control tower. |  |
| **Regulation 154 *Information marking.*** | **154. Information marking.**(1) An operator shall ~~install~~ provide information marking where an information sign is required but is physically impossible to install.(6) An information marking shall consist of—(a) an inscription in yellow upon a black background, when it replaces or supplements a location sign ~~direction or designation marking~~; and(b) an inscription in black upon a yellow background, when it replaces or supplements a direction or destination sign |  |
| **Regulation 155 *Establishment of aeronautical ground lights.*** | (4) A person shall not interfere with an aeronautical ground light without the permission of the aerodrome operator. |  |
| **Regulation 156 *Lights which may endanger the safety of aircraft.*** | (3) Where a light appears ~~to the Authority~~ to be capable of endangering the safety of aircraft as described in sub-regulation (1), the Authority may direct the owner of the place where the light is exhibited or the person having charge of light to extinguish and to prevent in the future, the exhibition of the light within the period specified. |  |
| **Regulation 158 *Lights which may cause confusion.*** | A non-aeronautical ground light which, by reason of its intensity, configuration or colour, might prevent, or cause confusion in, the clear interpretation of aeronautical ground lights shall be extinguished, screened or otherwise modified so as to eliminate such a possibility and particular attention shall be directed to a non-aeronautical ground light visible from the air within the areas described in this regulation—(a) Instrument runway - code number 4- within the areas before the threshold and beyond the end of the runway extending at least 4 500 m in length from the threshold and runway end and 750 m either side of the extended runway centreline in width;(b) Instrument runway - code number 2 or 3- as stipulated in paragraph ~~in~~ (a), except that the length shall be at least 3000 m; and(c) Instrument runway — code number 1; and non-instrument runway: within the approach area. |  |
| **Regulation 164 *Aeronautical beacons***  | **164. Provision of Aeronautical beacons**(1) Where operationally necessary, an aerodrome beacon or an identification beacon shall be provided at each aerodrome intended for use at night. |  |
| **Regulation 169. *Precision approach category I lighting system.*** | (1) A precision approach category I lighting system shall consist of a row of lights on the extended centreline of the runway extending, wherever possible, over a distance of ~~500~~ 900 m from the runway threshold with a row of lights forming a crossbar 30 m in length at a distance of 300 m from the runway threshold.~~(5) If it is not physically possible to provide a centerline extending for a distance of 420 m from the threshold, it shall be extended to 300 m so as to include the crossbar and if the extension is not possible, the centreline lights shall be extended as far as practicable, and each centreline light shall then consist of a barrette at least 3 m in length.~~~~(6) Subject to the approach system having a crossbar at 300 m from the threshold, an additional crossbar may be provided at 150 m from the threshold.~~(12) If the centreline consists of barrettes as described in subregulation (9) (b) or (10)(b), each barrette shall be supplemented by a flashing light, except where such lighting is considered unnecessary taking into account the characteristics of the system and the nature of the meteorological conditions.(13) Each flashing light as described in sub regulation (12) shall be flashed twice a second in sequence, beginning with the outermost light and progressing toward the threshold to the innermost light of the system.(15) If the centreline consists of lights as described in ~~above~~ sub regulation (9) (a) or (10)(a), additional crossbars of lights to the crossbar provided at 300 m from the threshold shall be provided at 150 m, 450 m, 600 m and 750 m from the threshold.(18) Where additional crossbars described in sub regulations (15) to (17) are incorporated into the system, the outer ends of the crossbars shall be on two straight lines that either are parallel to the line of the centreline lights or converge to meet the runway centreline 300m from the threshold.(19) The lights shall be in accordance with the specifications of Schedule 6, Figure A2-1. |  |
| **Regulation 170 *Precision approach category II and III lighting system***  | (3) Where the serviceability level of the approach lights specified as maintenance objectives in Regulation 276 (9) can be demonstrated, the system may have two side rows of lights, extending 240 m from the threshold, and two crossbars, one at 150 m and one at 300 m from the threshold as shown in Figure 17.(6) Where the serviceability level of the approach lights specified as maintenance objectives in ~~sub-~~regulation 276 (9) ~~(3)~~, can be demonstrated, lights forming the side rows may be placed on each side of the centreline, at a longitudinal spacing of 60 m with the first light located 60 m from the threshold.(10) If the centreline beyond a distance of 300 m from the threshold consists of lights as described in sub-regulation (16) (b) or 17 (b) ~~(9)~~, additional crossbars of lights shall be provided at 450 m, 600 m and 750 m from the threshold.(11) Where the additional crossbars described in ~~this~~ sub regulation (10) are incorporated in the system, the outer ends of the crossbars shall lie on two straight lines that either are parallel to the centreline or converge to meet the runway centreline 300 m from the threshold.(15) Where the serviceability level of the approach lights specified as maintenance objectives in ~~sub-~~regulation 276 (9) ~~(3)~~ can be demonstrated, the centreline of a precision approach category II and III lighting system for the first 300 m from the threshold may consist of either—(a) barrettes, where the centreline beyond 300 m from thethreshold consists of barrettes as above;(b) alternate single light sources and barrettes, where thecentreline beyond 300 m from the threshold consists of singlelight sources as described in paragraph (a) with the innermostsingle light source located 30 m and the innermost barrettelocated 60 m from the threshold; or(c) single light sources where the threshold is displaced 300 m or more; all of which shall show variable white.(17) Where the serviceability level of the approach lights specified as maintenance objectives ~~sub-~~regulation 276 (9) ~~(3)~~ can be demonstrated, beyond 300 m from the threshold each centreline light position may consist of either —(a) a barrette; or(b) a single light source; all of which shall show variable white.(19) If the centreline beyond 300 m from the threshold consists of barrettes as described in sub- regulation ~~18~~16(a) or 17(a), each barrette beyond 300 m shall be supplemented by a flashing light, except where such lighting is considered unnecessary taking into account the characteristics of the system and the nature of the meteorological conditions.(20) Each flashing light as described in sub regulation (19) ~~capacitor discharge light~~ shall be flashed twice a second in sequence, beginning with the outermost light and progressing toward the threshold to the innermost light of the system and the design of the electrical circuit shall be such that these lights can be operated independently of the other lights of the approach lighting system.(23) The intensity of the red lights shall be compatible with the intensity of the white lights and the lights shall conform to the specifications prescribed in Schedule 6, figures A2-1 and A2-2. | *Request renumbering of schedule figures*  |
| **Regulation 171 *Visual approach slope indicator systems*** | (2) The standard visual approach slope indicator systems shall consist of PAPI and APAPI systems, as appropriate conforming to the specifications in ~~these~~ regulations 172 and 173, as shown in Figure 18. |  |
| **Regulation 172 *PAPI and APAPI.***  | (3) The wing bar of a PAPI shall be constructed and arranged insuch a manner that a pilot making an approach ~~may~~ will —(4) The wing bar of an APAPI shall be constructed and arranged in such a manner that a pilot making an approach will ~~shall~~—

|  |  |  |
| --- | --- | --- |
| Eye-to-wheel height of aeroplane in the approach configurationa(1) | Required wheel clearance (metres)b,c(2) | Minimum wheel clearance (metres)~~c~~d(3) |
| up to but not including 3 m | 6 | 3~~d~~e |
| 3 m up to but not including 5 m | 9 | 4 |
| 5 m up to but not including 8 m | 9 | 5 |
| 8 m up to but not including 14 m | 9 | 6 |
| (a) In selecting the eye-to-wheel height group, only aeroplanes meant to use the system on a regular basis shall be considered. The most demanding amongst such aeroplanes shall determine the eye-to-wheel height group.(b) ~~The wheel clearances shown in column (2) shall be provided, unless the threshold is displaced.~~ Where practicable the desired wheel clearances shown in column (2) shall be provided. (c) The wheel clearances in column (2) may be reduced to no less than those in column (3) where an aeronautical study indicates that such reduced wheel clearances are acceptable. ~~(c)~~(d)When a reduced wheel clearance is provided at a displaced threshold it shall be ensured that the corresponding desired wheel clearance specified in column (2) shall be available when an aeroplane at the top end of the eye-to-wheel height group chosen overflies the extremity of the runway.(d) (e) This wheel clearance may be reduced to 1.5 m on runways used mainly by light-weight non-turbojet aeroplanes. |

***Table 7. Wheel clearance over threshold for PAPI and APAPI***(9) The colour transition from red to white in the vertical plane shall be such as to appear to an observer, at a distance of not less than 300 m, to occur within a vertical angle of not more than 3' ~~3°~~**.** |  |
| **Regulation 173 *Approach slope and elevation setting of light units.*** | (1A) The approach slope as defined in Figure 20 shall be appropriate for use by the aeroplanes using the approach. (2) The angle of elevation settings of the light units in a PAPI wing bar shall be such that, during an approach, the pilot of an aeroplane observing a signal of one white and three reds will clear all objects in the approach area by a safe margin as per table 7.(3) The angle of elevation settings of the light units in an APAPI wing bar shall be such that, during an approach, the pilot of an aeroplane observing the lowest on slope signal, that is one white and one red, will clear all objects in the approach area by a safe margin as per table 7. |  |
| **Regulation 174 *Obstacle protection surface for PAPI and APAPI*** | Review table as below (see end of document) (5) Where an aeronautical study indicates that an existing object extending above an Obstacle Protection Surface could adversely affect the safety of operations of aeroplanes one or more of the following measures shall be taken—(a) remove the object;~~(a)~~ (b) suitably raise the approach slope of the system;~~(b)~~ (c) reduce the azimuth spread of the system so that the object is outside the confines of the beam;~~(c)~~ (d) displace the axis of the system and its associated Obstacle Protection Surface by no more than 5°;~~(d) suitably displace the threshold; and~~(e) ~~where the measure in paragraph (d) is found to be impracticable,~~ suitably displace the system upwind of the threshold such that the object no longer penetrates the Obstacle Protection Surface ~~to provide an increase in threshold crossing height equal to the height of the object penetration~~. |  |
| **Regulation 175 *Circling guidance lights*** | (3) Circling guidance lights shall consist of—(a) lights indicating the extended centreline of the runway or parts of any approach lighting system;(b) lights indicating the position of the runway threshold;(c) lights indicating the direction or location of the runway; ~~or~~~~(d)~~ or a combination of such lights as is appropriate to the runway under consideration. |  |
| **Regulation 176 *Runway lead-in lighting systems*** | (4) A runway lead-in lighting system shall extend from a point as determined by the aerodrome operator ~~Authority~~, up to a point where the approach lighting system, if provided or the runway or the runway lighting system is in view.7) The flashing and steady burninglights shall be white ~~and the steady burning lights gaseous~~.~~(9) Runway threshold identification lights shall be installed —~~~~(a) at the threshold of a non-precision approach runway when~~~~additional threshold conspicuity is necessary or where it is~~~~not practicable to provide other approach lighting aids; and~~~~(b) where a runway threshold is permanently displaced from the~~~~runway extremity or temporarily displaced from the normal position and additional threshold conspicuity is necessary.~~~~(10) Runway threshold identification lights shall be located symmetrically about the runway centreline, in line with the threshold and approximately 10 m outside each line of runway edge lights.~~~~(11) Runway threshold identification lights shall be flashing white lights with a flash frequency between 60 and 120 per minute.~~~~(12) The lights shall be visible only in the direction of approach to the runway.~~ |  |
| **Regulation 176 B**  | **Runway threshold identification lights**(1) Runway threshold identification lights shall be installed —(a) at the threshold of a non-precision approach runway whenadditional threshold conspicuity is necessary or where it isnot practicable to provide other approach lighting aids; and(b) where a runway threshold is permanently displaced from therunway extremity or temporarily displaced from the normal position and additional threshold conspicuity is necessary.(2) Runway threshold identification lights shall be located symmetrically about the runway centreline, in line with the threshold and approximately 10 m outside each line of runway edge lights.(3) Runway threshold identification lights shall be flashing white lights with a flash frequency between 60 and 120 per minute.(4) The lights shall be visible only in the direction of approach to the runway. |  |
| **Regulation 178 *Runway threshold and wing bar lights*** | (1) Runway threshold lights shall be provided for a runway equipped with runway edge lights except on a non-instrument or non-precision approach runway where the threshold is displaced and wing bar lights are provided, as shown in figure 22A.(4) Threshold lighting shall consist of—(a) on a non-instrument or non-precision approach runway ~~with~~, at least six lights; | *Introducing a new figure*  |
| **Regulation 179 *Runway end lights***  | (1) Runway end lights shall be provided for a runway equipped with runway edge lights, as shown in figure 22A.shall be in accordance with the specifications of Fourth Schedule Figure 5-22(3) Runway end lighting shall consist of at least six lights and the lights shall be either—(a) equally spaced between the rows of runway edge lights, or(b) symmetrically disposed about the runway centreline in two groups with the lights uniformly spaced in each group and with a gap between the groups of not more than half the distance between the rows of runway edge lights.~~(4)~~ For a precision approach runway category III, the spacing between runway end lights, except between the two innermost lights if a gap is used, shall not exceed 6 m.~~(5)~~ (4) Runway end lights shall be fixed unidirectional lights showing red in the direction of the runway ~~and the intensity~~.(6) The intensity and ~~B~~beam spread of the lights shall be adequate for the conditions of visibility and ambient light in which use of the runway is intended. |  |
| **Regulation 180 *Runway centreline lights*** | (6) Where the serviceability level of the runway centerline lights specified as maintenance objectives in Regulation 276 (9) or (18) and the runway is intended for use in runway visual range conditions of 350m or greater, the longitudinal spacing maybe approximately 30m.(7) Centreline guidance for take-off from the beginning of arunway to a displaced threshold shall be provided by —(a) an approach lighting system if its characteristics andintensity settings afford the guidance required during takeoffand it does not dazzle the pilot of an aircraft taking off; (b) runway centreline lights; or(c) barrettes of at least 3 m length and spaced at uniform intervals of 30 m, as shown in Figure 22, designed so that their photometric characteristics and intensity setting afford the guidance required during take-off without dazzling the pilot of an aircraft taking off —~~(i)~~ (8) where necessary, provision shall be made to extinguishthose centreline lights specified in sub-regulation(~~5~~7)(b) orreset the intensity of the approach lighting system orbarrettes when the runway is being used for landing;~~(ii)~~ (9) in no case shall only the single source runway centerline lights show from the beginning of the runway to a displaced threshold when the runway is being used for landing.~~(8)~~ (10) Runway centreline lights shall be fixed lights showing variable white from the threshold to the point 900 m from the runway end; alternate red and variable white from 900 m to 300 m from the runway end; and red from 300 m to the runway end, except that for runways less than 1 800 m in length, the alternate red and variable white lights shall extend from the mid-point of the runway usable for landing to 300 m from the runway end. ~~(9)~~ (11) Runway centreline lights shall conform to the specifications in Schedule 6 Figure A2-6 or A2-7. |  |
| **Regulation 181 *Runway touchdown zone lights*** | (7) A barrette shall be not less than 3 m nor more than 4.5 m in length. |  |
| **Regulation 182 *Simple Touchdown Zone Lights*** | (1) Except where Touchdown Zone (TDZ) Lights are provided, in accordance with Regulation 181, at an aerodrome where the approach angle is greater than 3.5 degrees or the Landing Distance Available combined with other factors increases the risk of an overrun, Simple Touchdown Zone Lights shall be provided.(4) The spacing between the lights of the same pair shall not be more than 1.5 m or half the width of the touchdown zone marking, whichever is greater, as shown in figure 23A. | *Introduced a figure 5-24 from annex*  |
| **Regulation 183 *Rapid exit taxiway indicator lights*** | (3) A set of rapid exit taxiway indicator lights shall be located on the runway on the same side of the runway centreline as the associated rapid exit taxiway, in the configuration shown in Figure 23, and in each set, the light shall be located 2 m apart and light nearest to the runway centreline shall be displaced 2 m from the runway centreline. |  |
| **Regulation 184 *Stop-way lights*** | ~~(4) Taxiway centreline lights on rapid exit taxiway shall commence at a point atleast 60m before the taxiway centreline curve and continue beyond the curve to a point on the centreline of the taxiway where an aeroplane can be expected to reach normal taxiing speed and the lights on that portion parallel to the runway centreline shall be atleast 60m from any row of runway centreline lights a shown in Figure 24.~~ |  |
| **Regulation 185 *Taxiway centreline lights*** | (6) Except as provided in sub regulation ~~(8)~~(10), taxiway centerline lights on a taxiway other than an exit taxiway and on a runway forming part of a standard taxi-route shall be fixed lights showing green with beam dimensions such that the light is visible only from aeroplanes on or in the vicinity of the taxiway.(8) Alternate taxiway centreline lights shall show green and yellow from their beginning near the runway centreline to the perimeter of the ILS or MLS critical or sensitive area or the lower edge of the inner transitional surface, whichever is farthest from the runway; and thereafter all lights shall show green, as shown in figure 24A.(11) Where higher intensities are required, from an operational point of view, taxiway centreline lights on rapid exit taxiways intended for use in runway visual range conditions less than a value of 350m shall be in accordance with the specifications of Schedule 6, Figure A2-12 ~~prescribed by the Authority~~. | *Inserting new figure 5-26 in the annex*  |
| **Regulation 186 *Taxiway centreline lights on taxiways*** | ~~(4) Taxiway centreline lights on rapid exit taxiway shall~~~~commence at a point atleast 60m before the beginning of the taxiway centreline curve and shall continue beyond the curve to a point on the taxiway to a point on the centreline of the taxiway where an aeroplane can be expected to reach normal taxiing speed and the lights on that portion parallel to the runway centreline shall be atleast 60m from any row of runway centreline lights as shown in Figure 24.~~~~(5) Taxiway centreline lights on rapid exit taxiway shall be~~~~spaced at longitudinal intervals of not more than 15m, except thatwhere runway centreline lights are not provided with a greater interval not exceeding 30m maybe used.~~ |  |
| **Regulation 186B** | **Taxiway centreline lights on rapid exit taxiways.**(1) Taxiway centreline lights on rapid exit taxiway shallcommence at a point atleast 60m before the beginning of the taxiway centreline curve and shall continue beyond the curve to a point on the taxiway to a point on the centreline of the taxiway where an aeroplane can be expected to reach normal taxiing speed and the lights on that portion parallel to the runway centreline shall be atleast 60m from any row of runway centreline lights as shown in Figure 24.(2) Taxiway centreline lights on rapid exit taxiway shall bespaced at longitudinal intervals of not more than 15m, except thatwhere runway centreline lights are not provided with a greater interval not exceeding 30m maybe used. |  |
| **Regulation 187 *Taxiway centreline lights on rapid exit taxiways***  | **Taxiway centreline lights on other ~~rapid~~ exit taxiways.**(1) Taxiway centreline lights on exit taxiways other thanother exit taxiways shall commence at the point where the taxiway centreline marking begins to curve from the runway centreline, and follow the curved taxiway centreline marking at least to the point where the marking leaves the runway and the first light shall be at least 60 cm from any row of runway centreline lights, as shown in Figure 24.(2) The lights shall be spaced at longitudinal intervals of notmore than 7.5 m. |  |
| **Regulation 190 *Runway turn pad lights*** | Runway turn pad lights shall be provided on a runway turn pad intended for use at night. | *Insert new sub regulation after sub regulation (1)* |
| **Regulation 191 *Stop bars*** | **191. Stop bars and no entry bar**  (2) A stop bar shall be provided at every runway-holding position serving a runway when it is intended that the runway will be used in runway visual range conditions less than a value of ~~3~~550 m, except where—~~(3) A stop bar shall be provided at every runway-holding position serving a runway when it is intended that the runway will be used in runway visual range conditions of values between 350 m and 550 m, except where—~~~~(a) appropriate aids and procedures are available to assist in preventing inadvertent incursions of traffic onto the runway; or~~~~(b) operational procedures exist to limit, in runway visual range conditions less than a value of 550 m, the number of—~~~~(i) aircraft on the manoeuvring area to one at a time; and~~~~(ii) vehicles on the manoeuvring area to the essential minimum.~~(16A) A no-entry bar shall be co-located with a no-entry sign or a no-entry marking. ~~(22) The lighting circuit shall be designed so that—~~~~(a) no-entry bars are switchable selectively or in groups;~~~~(b) when a no-entry bar is illuminated, any taxiway centreline~~ ~~lights installed beyond the no-entry bar, when viewed towards the runway, shall be extinguished for a distance of~~~~atleast 90m; and~~~~(c) when a no-entry bar is illuminated, any stop bar installed between the no-entry bar and the runway shall be extinguished~~. (22A) Taxiway centre line lights installed beyond the no-entry bar, looking in the direction of the runway, shall not be visible when viewed from the taxiway.  | *Amend by deleting and replacing text* *Amend by deleting sub regulation (3) and renumber* *Amend by; inserting new sub regulation after sub regulation (16), new text and deleting text**Amend by; inserting new sub regulation after sub regulation (21),* |
| **Regulation 193 *Runway guard lights.*** | (3a) Where more than one runway-holding positions exist at a runway/taxiway intersection, only the set of runway guard lights associated with the operational runway-holding position shall be illuminated. (4) Runway guard lights, Configuration A, shall be located at each side of the taxiway on the holding side of the runway-holding position marking. ~~at a distance from the runway centreline not less than that specified for a take-off runway~~. (5) Runway guard lights, Configuration B, shall be located across the taxiway on the holding side of the runway-holding position marking ~~at a distance from the runway centreline not less than that specified for a take-off runway.~~ (9) The light beam shall be unidirectional and shall show yellow in the direction of approach to ~~aligned so as to be visible to the pilot of an aeroplane taxiing to~~ the runway-holding position. | *Amend by; inserting new sub regulation after sub regulation (3) and renumber, and new text and deleting some text*  |
| **Regulation 196 *Azimuth guidance unit*** | (1) The azimuth guidance unit shall be located on or close to the extension of the stand centreline ahead of the aircraft so that its signals are visible from the cockpit of an aircraft throughout the docking manoeuvre and aligned for use at least by the pilot occupying the left seat. |  |
| **Regulation 197 *Stopping position indicator*** | (2) The stopping position indicator shall be usable at least by the pilot occupying the left seat.~~(3) The stopping position indicator shall be usable by the pilots occupying both the left and right seats~~. |  |
| **Regulation 198 *Advanced Visual Docking Guidance System*** | 198. Advanced Visual Docking Guidance System.(1) An Advanced Visual Docking Guidance System (A-VDGS) shall be provided where it is operationally desirable to confirm the correct aircraft type for which guidance is being provided or to indicate the stand centre line in use, where more than one is provided for.~~(1)~~ (2) The A-VDGS shall be suitable for use by all types of aircraft for which the aircraft stand is intended.~~(2)~~ (3) The A-VDGS shall be used only in conditions in which its operational performance is specified.(8) Symbols and graphics used to depict guidance information shall be intuitively representative of the type of information provided.(9) the time taken from the determination of the lateral displacement to its display shall not result in a deviation of the aircraft when operated in normal conditions from the stand centreline greater than 1m.~~(9)~~ (10) Information on the lateral displacement of the aircraft relative to the stand centreline shall be provided at least 25 m prior to the stop position.(15) The information on displacement of the aircraft relative to the stand centreline and distance to stopping position, when displaced, shall be provided with the accuracy specified below—

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Guidance information | Maximum deviation at stop position (stop area) | Maximum deviation at 9m from stop position | Maximum deviation at 15m from stop position | Maximum deviation at 25m from stop position |
| Azimuth | ±250 mm | ±340 mm | ±400 mm | ±500 mm |
| Distance | ±500 mm | ±1000mm | ±1300mm | Not specified |

 |  |
| **Regulation 199 *Aircraft Stand manoeuvring guidance lights.*** | (6) The ~~intensity of~~ lighting circuit shall be designed so that the lights may be ~~situated~~ switched on to indicate that an aircraft stand is to be used and switched off to indicate that it is not to be used.(7) Aircraft stand manoeuvring guidance lights shall be collocated with the aircraft stand markings~~” as specified in sub-regulation (6)~~. (relocate sub regulation to become sub regulation (2) )  |  |
| **Regulation 200 *Road-holding position light*** | (1) A road-holding position light shall be provided at each road holding position serving a runway when it is intended that the runway will be used in runway visual range conditions less than a value of ~~550~~ 350 m.(3) The road-holding position light shall comprise of a controllable red (stop) and ~~or~~ green (go) traffic light normally controlled by air traffic services. |  |
| **Regulation 201 *Runway status lights.*** | (1) Runway status lights is a type of autonomous runway incursion warning system and the two basic visual components of the runway status lights are runway entrance lights (RELs) and take-off hold lights (THLs) and either component may be installed by itself but the two components are designed to be complementary to each other. |  |
| **Regulation 202 *Signs***  | (1) Signs shall be provided to convey a mandatory instruction, information on a specific location or destination on a movement area or to provide other information to meet the requirements of regulation 263(~~2~~1).(2) A variable message sign shall be provided where—(a) the instruction or information displayed on the sign is relevant only during a certain period of time; or (b) there is a need for variable predetermined information to be displayed on the sign to meet the requirements of regulation ~~202~~ 263 (1).

|  |  |  |
| --- | --- | --- |
| Sign height (mm) | Perpendicular distance from defined taxiway pavement edge to near side of sign | Perpendicular distance from defined runway pavement edge to near side of sign |
| Codenumber | Legend | Face(min.) | Installed(max) |
| 1 or 2 | 200 | ~~400~~ 300 | 700 | 5-11 m | 3-10 m |
| 1 or 2 | 300 | ~~600~~ 450 | 900 | 5-11 m | 3-10 m |
| 3 or 4 | 300 | ~~600~~ 450 | 900 | 11-21 m | 8-15 m |
| 3 or 4 | 400 | ~~800~~ 600 | 1 100 | 11-21 m | 8-15 m |

***Table 9. Location distances for taxiing guidance signs including runway exit signs*** | *Amend by inserting new text and deleting some text* |
| **Regulation 203 *Mandatory instruction signs***  | (5) A pattern “A” runway-holding position marking at a runway holding position established in accordance with regulation 111 (3) ~~which~~ shall be supplemented with a runway-holding position sign.(11) A runway-holding position sign shall be located on each side of the runway-holding position established in accordance with regulation 111 (3) facing the approach to the obstacle limitation surface, ~~or~~ ILS critical area or MLS sensitive area, as appropriate.(15) The inscription on a category I, II, III, joint II/III or joint I/II/III holding position sign shall consist of the runway designator followed by CAT I, CAT II, CAT III, CAT II/III or CAT I/II/III, as appropriate. |  |
| **Regulation 204 *Information signs*** | **204. Information signs**(1) An information sign shall be provided where there is an operational need to identify by a sign, a specific location or routing, ~~(~~direction or destination~~)~~, information.(10) A location sign shall be provided in conjunction with a runway designation sign except at a runway/ ~~or~~ runway intersection.(16) A runway exit sign shall be located on the same side of the runway as the exit is located, that is left or right, and positioned in accordance with Table 9.(18) A runway vacated sign shall be located at least on one sideof the taxiway and the distance between the sign and the centreline of a runway shall be not less than the greater of the following—(a) the distance between the centreline of the runway and theperimeter of the ILS critical area or MLS sensitive area; or(34) A taxiway shall be identified by a designator that is used only once on an aerodrome comprising a single letter, two letters or a combination of a letter or letters followed by a number. (35) When designating taxiways, ~~the use of the letters I, O or X and~~ the use of words such as inner and outer shall be avoided wherever possible ~~to avoid confusion with the numerals 1, 0 and closed marking~~.(35A) When designating taxiways, the use of the letters I, O or X shall not be used to avoid confusion with the numerals 1, 0 and closed marking.(35A) Apron stand designators shall not be the same as taxiway designators. | *Amend by inserting new sub regulation, new text and deleting some text* |
| **Regulation 211. *Stop way edge markers.*** | **211. Stop way edge markers.**(1) ~~Where provided,~~ ~~s~~Stop way edge markers shall be provided when the extent of a stop way is not clearly indicated by its appearance compared with that of the surrounding ground. |  |
| **Regulation 212 *Taxiway edge markers.*** | **212. Taxiway edge markers.**(1) ~~Where provided,~~ T~~t~~axiway edge markers shall be provided on a taxiway where the code number is 1 or 2 and taxiway Centreline or edge lights or taxiway Centreline markers are not provided. |  |
| **Regulation 215 *Boundary markers.*** | **215. Boundary markers.** (3) Where provided, boundary markers shall be of a form similar to that shown in Figure 29 or in the form of a cone not less than 50 cm high and not less than 75 cm in diameter at the base. |  |
| **Regulation 217 *Marking and lighting of objects within the lateral boundaries of the obstacle limitation surfaces.*** | (8) A fixed obstacle that extends above a horizontal surfaceshall be marked and, if the aerodrome is used at night, lighted except that—(a) such marking and lighting may be omitted when—(i) the obstacle is shielded by another fixed obstacle; |  |
| **Regulation 219 *Marking or lighting of objects*** | **219. Marking or lighting of objects**(1) The presence of objects which shall be lighted, in accordance with these Regulations shall be indicated by low, medium or high-intensity lights or a combination of such lights.(2) Low-intensity obstacle lights, Types A, B, C and D, medium-intensity obstacle lights Types A, B and C, high-intensity obstacle lights Type A and B, shall be in accordance with the specifications in Table 10 and Schedule 5 ~~any other requirements prescribed by the Authority~~. |  |
| **Regulation 220 *Marking and lighting of mobile objects.*** | **220. Marking and lighting of mobile objects.**(2) When mobile objects are marked by colour, a single conspicuous colour, preferably red or yellowish green for emergency vehicles and yellow for service vehicles, shall be used, unless an aeronautical study, to the satisfaction of the Authority, indicates that two contrasting colours are more conspicuous in the conditions experienced the aerodrome.~~.~~(5) The presence of objects shall be lighted as specified in Table 10 ~~6.1~~ and shall be indicated by low, medium or high intensity obstacle lights or a combination of such lights.(6) Low intensity obstacle lights, Types A, B, C, D and E, medium intensity obstacle lights Type A and B, shall be in accordance with the specifications in Table 10 ~~- 1~~ and Schedule 5. |  |
| **Regulation 221 *Intensity and colour of obstacle lights*** | The intensity and color of obstacle lights shall be as specified in tables 10, 11 and 12. ~~prescribed by the Authority~~. |  |
| **Regulation 222 *Marking of fixed objects*** | (5) The formula for determining bandwidth and for having an odd number of permitting both the top and bottom bands to be of the darker colour shall be as indicated in Table 13.

|  |  |
| --- | --- |
| Longest dimension |  |
| Greater than  | Not exceeding | Band width |
| 1.5 m  | ~~26~~ 210 m | 1/7 of longest dimension |
| 210 m  | 270 m | 1/9 of longest dimension |
| 270 m  | 330 m | 1/11 of longest dimension |
| 330 m  | 390 m | 1/13 of longest dimension |
| 390 m  | 450 m | 1/15 of longest dimension |
| 450 m | 510 m | 1/17 of longest dimension |
| 510 m  | 570 m | 1/19 of longest dimension |
| 570 m  | 630 m | 1/21 of longest dimension |

***Table 13. – Marking band widths*** |  |
| **Regulation 228 *Lighting of wind turbines*** | (1) Where lighting is considered necessary, medium-intensityobstacle lights shall be used and in the case of a wind farm, that is a group of two or more wind turbines, it shall be regarded as an extensive object and the lights shall be installed –(a) to identify the perimeter of the wind farm;(b) respecting the maximum spacing between the lights alongthe perimeter, unless a dedicated assessment shows that agreater spacing can be used;(c) such that, where flashing lights are used, they flash simultaneously; and(d) such that, within a wind farm, any wind turbines of significantly higher elevation are also identified wherever they are located.(e) at locations prescribed in (a), (b) and (d), respecting the following criteria:(i) for wind turbines of less than 150 m in overall height (hub height plus vertical blade height), medium-intensitylighting on the nacelle shall be provided;(ii) for wind turbines from 150 m to 315 m in overall height, in addition to the medium-intensity light installed on the nacelle, a second light serving as an alternate shall be provided in case of failure of the operating light. The lights shall be installed to assure that the output of either light is not blocked by the other; and(iii) in addition, for wind turbines from 150 m to 315 m in overall height, an intermediate level at half the nacelle height of at least three low-intensity Type E lights, as specified in Regulation 219 (3) , shall be provided. If an aeronautical study shows that low-intensity Type E lights are not suitable, low-intensity Type A or B lights may be used.(3) Where lighting is deemed necessary for a single wind turbine or short line of wind turbines, the installation shall be in accordance with regulation ~~226(1)~~ 228(1)(e) or as determined by an aeronautical study |  |
| **Regulation 229. *Marking of overhead wires, cables, etc., and supporting towers.*** | (2) The supporting towers of overhead wires cables, etc., that require marking shall be marked in accordance with ~~these Regulations~~ Regulation 222 (1)–(6), except that the marking may be omitted when they are lighted by high intensity obstacle lights by day. |  |
| **Regulation 234 *Marking of Pre-threshold areas***  | (4) A chevron marking shall have an over~~-~~all width of at least 0.9m. |  |
| **Regulation 237 *Electrical power supply systems for air navigation services facilities*** | (5) Sub-regulation (3) applies for non-instrument runways except that a secondary power supply for visual aids may not be provided where an emergency lighting system in accordance with the specification in Regulation 163 is provided and is capable of being deployed within fifteen minutes.(14) An operator shall provide the following aerodrome facilities with secondary power supply capable of supplying power where there is a failure of the primary power supply —(a) the signalling lamp and the minimum lighting necessary to enable air traffic services personnel to carry out their duties;(b) all obstacle lights which, in the opinion of the Authority are essential to ensure the safe operation of aircraft;(c) approach, runway and taxiway lighting, as specified in sub regulations (9) to (13) ;(d) meteorological equipment;(e) essential security lighting, if provided in accordance with Regulation 266 (5) ;(f) essential equipment and facilities for the aerodrome emergency agencies;(g) floodlighting on a designated isolated aircraft packing position if provided; and(h) illumination of apron areas over which passengers may walk.**Table 11 - Secondary power supply requirements**

|  |  |  |
| --- | --- | --- |
| Runway Type | Lighting aids requiring power | Maximum switch-over time  |
| Non-instrument | Visual approach slope indicatorsaRunway edgebRunway thresholdbRunway endbObstacle | 15 seconds15 seconds15 seconds15 seconds15 seconds |
| Non-precision approach | Approach lighting systemVisual approach slope indicators a,d Runway edge dRunway threshold dRunway endObstacle a | 15 seconds15 seconds15 seconds15 seconds15 seconds15 seconds |
| Precision approach category I | Approach lighting systemVisual approach slope indicators a,dRunway edge dRunway threshold dRunway endEssential taxiways aObstacle a | 15 seconds15 seconds15 seconds15 seconds15 seconds15 seconds15 seconds |
| Precision approach category II | Inner 300 m of the approach lighting systemOther parts of the approach lighting systemObstacle aRunway edgeRunway thresholdRunway endRunway centre lineRunway touchdown zoneAll stop barsEssential taxiway | 1 second15 seconds15 seconds15 seconds1 second1 second1 second1 second1 second15 seconds |
| Runway meant for take-off in runway visualrange conditions less than a value of 800 m | Runway edgeRunway endRunway centre lineAll stop barsEssential taxiway aObstacle a | 15 seconds c1 second1 second1 second15 seconds15 seconds |

(a) Supplied with secondary power when their operation is essential to the safety of flight operation.(~~a~~b) See Part XIII—Visual aids for air navigation, regarding the use of emergency lighting.(~~a~~c) One second where no runway centreline lights are provided.(~~a~~d) One second where approaches are over hazardous or precipitous terrain. |  |
| **Regulation 239 *Monitoring of electrical systems*** | (4) For a runway meant for use in runway visual range conditions less than a value of 550 m, the lighting systems detailed in Table 15 shall be monitored automatically so as to provide an indication when the serviceability level of any element falls below the minimum serviceability level specified in regulation 276 (9) to (18) ~~by the Authority~~ and this information shall be relayed to the maintenance crew. |  |
| **Regulation 242 *Aerodrome emergency planning*** | (6) The emergency plan shall coordinate ~~provide for the~~ response ~~and~~ or participation of all existing agencies whose assistance is required in the event of an emergency, including —(11) This regulation applies to aerodromes in category A.(12) The Authority may apply this regulation to aerodromes in category B and C.~~(13) This regulation shall not apply to aerodromes in categories~~~~C, D and E.~~ |  |
| **Regulation 243 *Emergency planning committee*** | (1) An aerodrome operator shall form an emergency planning committee to discuss, determine and implement emergency planning arrangements commensurate with the size and type of aircraft that use the aerodrome. (3) The Authority may where it considers it necessary apply this regulation to aerodromes in category B and C.~~(4) This regulation shall not apply to aerodromes in categories~~~~C, D and E.~~ |  |
| **Regulation 245 *Aerodrome emergency exercises*** | (2) The aerodrome emergency plan referred to in sub-regulation (1) shall be tested by conducting –(a) a full-scale aerodrome emergency exercise at intervals not exceeding two years and partial emergency exercises in the intervening year to ensure that any deficiencies found during the full-scale aerodrome emergency exercise have been corrected; or(b) a series of modular tests commencing in the first year and concluding in a full-scale aerodrome emergency exercise at intervals not exceeding three years; and reviewed thereafter or after an actual emergency, so as to correct any deficiency found during such exercises or actual emergency. |  |
| **Regulation 246 *Emergencies in difficult environment***  | (5) This regulation may apply to an aerodrome in category B and C where deemed necessary by the Authority.~~(6) The Authority may where it considers it necessary apply this regulation to aerodromes in categories C, D and E~~. |  |
| **Regulation 247 *Establishment of aerodrome rescue and fire- fighting services.*** | (5) This regulation applies to aerodromes in categories A and B.(6) The Authority may prescribe alternative means of compliance with this regulation for aerodromes in categories C ~~and D~~. |  |
| **Regulation 248 *Determination of aerodrome rescue and fire- fighting category*** | (1) The aerodrome rescue and fire-fighting services category shall be determined using Table 16 and shall be based on the longest ~~aircraft~~ aeroplanes that normally uses the aerodrome, and its fuselage width.(2) If after selecting the aerodrome category appropriate to the longest aeroplane~~’~~s overall length, that aeroplane’s fuselage width is found to be greater than the maximum width in Table 16, column 3, for that category, then the category for that aeroplane shall be one category higher. |  |
| **Regulation 250 *Extinguishing agents*** | (3) The complementary extinguishing agent shall be a dry chemical powder suitable for extinguishing hydrocarbon fires.~~,~~~~and~~ ~~c~~Care shall be taken to ensure compatibility when selecting dry chemical powder for use with foam, and alternate complementary agents having equivalent fire-fighting capability may be utilised.(4) The amounts of water for foam production and the complementary agents to be provided on the rescue and fire fighting vehicles shall be in accordance with the aerodrome category determined in accordance with Regulation 249 (1) t0 (3) and Table 17.(7) For aerodrome fire-fighting categories ~~I~~ 1 and 2 ~~II~~, up to one hundred per cent of water may be replaced by a complementary agent. |  |
| **Regulation 256 *Provision of communication and alerting systems for rescue and fire-******fighting services*** | (1) An aerodrome operator shall provide a ~~discreet~~ discrete communication system linking a fire station with the control tower, any other fire station on the aerodrome and the rescue and fire-fighting vehicles. |  |
| **Regulation 258 *Requirements for rescue and fire-fighting personnel*** | (3) An aerodrome operator shall establish and implement a training programme for ~~The~~ rescue and fire-fighting personnel. The training programme shall include training in fire dynamics, toxicity and basic first aid, extinguishing agents, their application, and fire-fighting techniques used at the aerodrome; handling of vehicles, vessels and equipment used at the aerodrome, including building RFF equipment; aerodrome layout; construction and layout of aircraft types that regularly use the aerodrome, and emergency aircraft evacuation assistance; operational tactics and manoeuvres; emergency communication and log keeping; leadership performance; physical fitness; handling of dangerous goods emergencies; rescue on water; response to public health emergencies; RFF personnel safety. |  |
| **Regulation 259 *Removal of disabled aircraft.*** | (4) Except where the Authority specifies, this regulation shallnot apply to aerodromes in categories B~~,~~ C~~, D and E~~. |  |
| **Regulation 260. *Apron management service*** | (1) ~~Where~~ When warranted by the volume of traffic and operating conditions, an appropriate apron management service shall be provided on an apron by an aerodrome air traffic services unit, by the aerodrome operating authority or by a cooperative combination of the services, in order to —(8) The Authority shall not apply this regulation to aerodromes in categories C~~, D and E~~ unless the Authority considers otherwise. |  |
| **Regulation 262 *Aerodrome vehicle operation*** | (8) A driver of a radio-equipped vehicle shall establish satisfactory two-way radio communication with the aerodrome control tower before entering the manoeuvring area and shall;(a) maintain a continuous listening watch on the assigned frequency while on the movement area; and (b) read back to the air traffic controller, safety related parts of instructions which are transmitted by voice for example instructions to enter, hold short of cross and operate on any operational runway or taxiway  |  |
| **Regulation 263 *Surface movement guidance and control systems*** | (3) The visual aid components of ~~an~~ a Surface Movement Guidance and Control System, that is, markings, lights and signs, shall be designed to conform with the relevant specifications in Part XI of these Regulations. |  |
| **Regulation 264 *Siting of equipment and installations on operational areas.*** | (5) Any equipment or installation required for air navigation or for aircraft safety purposes which shall be located on or near a strip of a precision approach runway category I, II or III and which—~~(a) is situated on that portion of the strip within 77.5 m of the runway centreline where the code number is 4 and the code letter is F; or~~(b) is situated within 240 m from the end of the strip and within—(i) 60 m of the extended runway centreline where the code number is 3 or 4; or(ii) 45 m of the extended runway centreline where the code number is 1 or 2; or(c) penetrates the inner approach surface, the inner transitional surface or the balked landing surface; shall be frangible and mounted as low as possible.  | *Amend by deleting text and renumber*  |
| **Regulation 265. *Location, construction and installation of equipment on operational areas.*** | ~~(1) Except for the purposes of air navigation or for aircraft safety, a person shall not construct or install equipment or any installation on a runway strip, a runway end safety area, a taxiway strip, a clearway or within any distances determined by the Authority, where the construction or the equipment may endanger the safety of an aircraft.~~~~(2) Where any equipment or installation required for air navigation or for aircraft safety purposes is to be located on a portion of a runway strip or on a runway end safety area, a taxiway strip or within any distances determined by the Authority, the equipment or installation shall be frangible and mounted as low as possible in accordance with the standards prescribed in these Regulations.~~ | Delete regulation and renumber  |
| **Regulation 270 *Operation of Aircraft exceeding certified characteristics of an aerodrome***  | (3) The operator shall assess the compatibility between the operation of the ~~aeroplane~~ aircraft and aerodrome infrastructure shall develop and implement appropriate measures in order to maintain an acceptable level of safety during operations. |  |
| **Regulation 271 *Autonomous runway incursion warning system*** | (3) Where an Autonomous Runway Incursion Warning System is installed at an aerodrome, information on its characteristics and status shall be provided to the Aeronautical Information Services for promulgation in the Aeronautical Information Publication with the description of the aerodrome surface movement guidance and control system and markings as specified in Civil Aviation (Aeronautical Information Services) Regulations 2020~~2019~~. |  |
| **Regulation 272 *Maintenance programme.*** | (2) In this regulation —~~(3)~~ (a) “facility” includes a pavement, visual aid, fencing, drainage system electrical systems and building; and~~(4)~~ (b) “preventive maintenance” means programmed maintenance work done to prevent failure or degradation of a facility .(~~5~~3) The design and application of the maintenance programme shall observe Human Factors principles. |  |
| **Regulation 273 *Maintenance of pavements and adjacent areas.*** | **273. Maintenance of pavements and adjacent areas.**(1) The surfaces of all movement areas including pavements, that is runways, taxiways, and aprons, and adjacent areas shall be inspected and their conditions monitored regularly as part of an aerodrome preventive and corrective maintenance programme with the objective of avoiding and eliminating any f~~F~~oreign o~~O~~bject~~s~~ d~~D~~ebris that might cause damage to aircraft or impair the operation of aircraft systems.(2) The surface of the runway shall be maintained in a condition that precludes formation of harmful irregularities such as water pools and rough surfaces ~~and the personnel measuring runway surface shall be trained to fulfil their duties~~.(5) ~~The friction characteristics of a runway shall be determined in accordance with Schedule 11.~~ When runway surface friction measurements are made for maintenance purposes using a self-wetting continuous friction measuring device, the performance of the device shall meet the requirements set in Table 19 in sub regulation (3). (6) Personnel measuring runway surface friction required in sub regulation (5) shall be trained to fulfil their duties. (~~6~~7) Corrective maintenance action shall be taken to prevent the runway surface friction characteristics for either the entire runway or a portion thereof from falling below a minimum friction level specified in sub regulation (3). (~~7~~8) (e) ~~When there is reason to believe that the drainage characteristics of a runway, or portions thereof, are poor due to slopes or depressions, then the runway surface friction characteristics should be assessed under natural or simulated conditions that are representative of local rain, and corrective maintenance action should be taken as necessary.~~ (9) The runway surface should be visually assessed, as necessary, under natural or simulated rain conditions for ponding or poor drainage and where required, corrective maintenance action taken*.*  | *Insert new sub regulation and renumber* |
| **Regulation 275 *Runway pavement overlays.*** | (5) Before a runway being overlaid is returned to a temporary operational status, a runway centreline marking conforming to the specifications in Regulation 140 shall be provided and in addition, the location of any temporary threshold shall be identified by a 3.6 m wide transverse stripe.(7) An operator shall ensure that, the overlay is constructed and maintained above the minimum friction level specified in table 19~~by the Authority~~.(13) The system of preventive maintenance employed for a stop bar provided at a runway-holding position used in conjunction with a runway intended for operations in runway visual range conditions less than a value of 350 m shall have the following objectives-(a) no more than two lights will remain unserviceable; and~~(14)~~ (b) two adjacent lights will not remain unserviceable unless the light spacing is significantly less than that specified.(20) The system of preventive maintenance employed for a runway meant for take-off in runway visual range conditions of a value of 550m or greater shall have as its objective that, during any period of operations, all runway lights are serviceable and that, in any event, at least 85 per cent of thelights are serviceable in the runway edge lights and runway end lights~~(21)~~ And ~~I~~in order to provide continuity of guidance, an unserviceable light shall not be permitted adjacent to another unserviceable light.~~(22) This regulation applies to aerodromes in category A and where considered necessary by the Authority, category B.~~ |  |
| **Regulation 278. *Works at aerodromes.*** | (1) An aerodrome operator shall establish procedures and precautions to ensure that any works carried out at an aerodrome do not endanger the safety of any aircraft operations. (2) An Aerodrome operator shall not commence any major aerodrome works at the, such as changes to the physical characteristics the aerodrome, without the approval of the authority. (3) The aerodrome operator shall establish a method of Work Plan (MOWP) before commencing any construction work on the aerodrome, unless the aerodrome is to be closed. (4) The request for approval of the aerodrome works shall be accompanied with- (a) relevant safety procedures(b) aerodrome operating procedures during the works(c) designs or plans and diagrams (~~2~~5) The aerodrome operator shall ensure that procedures and precautions referred to in sub-regulation (1) comply with guidelines prescribed by the Authority. |  |
| **Regulation 279.** ***Application for exemption.*** | (1) ~~In exceptional circumstances,~~ The Authority may exempt, in writing, an aerodrome operator ~~may on giving reason to the Authority apply for an exemption~~ from ~~some~~ complying with specific provisions of these Regulations.(2) An application for an exemption from a provision of these Regulations shall be submitted at least sixty days before the ~~proposed~~ effective date of exemption.(3) An aerodrome Operator shall make an application for exemption in writing shall contain —(a) the name of aerodrome and aerodrome operator address~~, physical address, mailing address, telephone number, fax number and email address of the applicant, where available~~;(b) the specific requirement from which the applicant seeks exemption;(c) justification for the exemption;(d) an aeronautical study;(e) a description of the type of operations to be conducted under the proposed exemption;(f) the proposed duration of the exemption;(g) a detailed description of the alternative means by which the applicant is to ensure a level of safety equivalent to that established by the regulation from which the exemption is applied for;(h) a review of any known safety concerns related to the required exemption, including information about any relevant accidents or incidents of which the applicant is aware;~~(i) where the applicant seeks to operate under the proposed exemption outside the air space of the State, an indication as to whether the exemption may contravene any provision of the standards and any regulations pertaining to the airspace in which the operation is to occur;~~ and(j) any other relevant information that may be required by the Authority.~~(4) Where the applicant seeks emergency processing of an application for exemption, the application shall contain facts and reasons to support the reasons for not filing the application within the time specified in sub regulation (2) and satisfactory reasons to deem the application an emergency.~~~~(5) The Authority may refuse an application made under subregulation (4) where in the opinion of the Authority—~~~~(a) the reasons given for the exemption are not satisfactory,~~~~(b) the exemption would adversely affect safety,~~~~(c) the exemption would not be in the public interest, or~~~~(d) if applicable, would not provide a level of safety equal to that intended by these Regulations.~~(6) Other than existing aerodrome facilities and equipment that are allowed to continue to be in use, or exemptions granted to the aerodrome operator for specific cases of consideration, an aerodrome operator is expected to comply with these regulations when introducing a new aerodrome facility or equipment, or when carrying out replacement or improvement works on an existing facility or equipment, unless the replacement or improvement works is limited to those of very minor nature. |  |
| **Regulation 280. *Initial review by the Authority.*** |  (1) The Authority shall review an application for exemption for accuracy and compliance with the requirements of these Regulations.~~(2) Where the Authority determines that the application for exemption meets the requirements of this Part and that a review of its merits are justified, the Authority shall notify and may publish in the Gazette or at least one local daily newspaper of wide circulation, a detailed summary of the application, for public comment, specifying the date by which the comments are to be received by the Authority for consideration.~~(3) Where the applicant does not meet the requirements of regulation 284, the Authority shall inform the applicant and no further action shall be taken on that application. |  |
| **Regulation 281. *Evaluation of application for exemption*** |  (1) The Authority shall conduct an evaluation of an application after the initial review in accordance with regulation 280, to determine whether —(a) the proposal by the applicant provides a level of safety equivalent to that established by the regulation from which the exemption is sought;(b) a grant of the exemption would contravene the applicable standards;~~(c) the request shall be granted or refused and any conditions or limitations that may be part of the exemption.~~(2) The Authority shall inform the applicant in writing and publish a detailed report of its evaluation and decision to grant or deny the application for exemption.(3) The report referred to in sub-regulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.~~(4) Where an exemption affects a significant population of the aviation industry in Uganda, the Authority shall publish the report in the Aeronautical Information Circular.~~ |  |
| **Regulation 281A** | **281A Grant or refusal of an exemption**(1) Where the Operator meets the requirements and criteria set for grant of exemption, the Authority shall grant an exemption for a specified period.(2) The Authority may refuse to grant an exemption where in the opinion of the Authority, 1. the reasons given for the exemption are not satisfactory.
2. the exemption will adversely affect safety
3. the exemption will not be in the public interest
4. if applicable, will not provide the level of safety to equal to that intended by these regulations.

(3) Exemptions granted to an aerodrome operator must also be recorded in the Aerodrome Manual. The Aerodrome Manual must contain details of the exemption, reason that the exemption was requested for, any resultant limitations, conditions or procedures imposed, and other related safety information. (4) An exemption granted in respect of an existing facility shall continue to apply until its expiry date. |  |
| **Regulation 281B** | **281B Control or review of Exemptions**Following the grant or refusal of an exemption the Authority shall carry out continuous review of the exemption.  |  |
| **Regulation 287. *Conditions for operating an aerodrome***  | (1) A person shall not operate an aerodrome ~~or~~ licensed, certificated under these Regulations unless the facilities and characteristics of the aerodrome are effectively related and match the needs of the aircraft for which the aerodrome is intended.(2) The Authority may closed an aerodrome where the aerodrome operator –(a) is incapable or unwilling to carry out corrective action or has repeatedly committed serious violations;(b) has demonstrated a lack of responsibility, such as deliberate and flagrant acts of non-compliance or falsification of records jeopardizing aviation safety; or(c) has made it convincingly clear that the continued operation of the aerodrome will be detrimental to the public interest. |  |
| **Regulation 290 *Aeronautical study.*** | (1) Where an aerodrome does not meet the requirements of these regulations ~~prescribed standards~~, the Authority may determine, after ~~carrying~~ ~~out~~ the conduct of an aeronautical study~~ies~~, the conditions and procedures that are necessary to ensure a level of safety equivalent to that established by the relevant prescribed regulations ~~standard~~.(2) Subject to sub regulation (1), the aerodrome operator shall conduct an aeronautical study, and submit the report to the authority for review. |  |
| **Regulation 291 *Deviations from standards.***  | **Deviations from ~~standards~~ regulations** Any deviation from these regulations ~~a prescribed standard~~ or prescribed practice and the conditions and procedures referred to in ~~these~~ Regulations 14 and 30 shall be set out in an endorsement on the aerodrome manual and aerodrome certificate or licence  |  |
| **Regulation 295****Offences and penalties**  | **Amend regulation in line with proposal in regulation 114. Retaining current penalty for the aviation industry.**  |  |
| **Schedule 2**  |  | Delete, requirements transposed into independent regulation  |
| **Schedule 8**  | (10) The face height of signs shall be as follows:

|  |  |
| --- | --- |
| Legend height | Face height (min) |
| 200 mm | ~~400~~ 300 mm |
| 300 mm | ~~600~~ 450 mm |
| 400 mm | ~~800~~ 600 mm |

**Figure A4-3. Sign dimensions** |  |
| **Schedule 9**  |  | Delete schedule  |
| **Schedule 11** | **19A. The ACR-PCR method of reporting pavement strength*** + 1. Overloading of pavements can result either from loads too large, or from a substantially increased application rate, or both. Loads larger than the defined (design or evaluation) load shorten the design life, whilst smaller loads extend it.
		2. With the exception of massive overloading, pavements in their structural behaviour are not subject to a particular limiting load above which they suddenly or catastrophically fail. Behaviour is such that a pavement can sustain a definable load for an expected number of repetitions during its design life. As a result, occasional minor overloading is acceptable, when expedient, with only limited loss of pavement life expectancy and relatively small acceleration of pavement deterioration.
		3. For those operations in which magnitude of overload and/or the frequency of use do not justify a detailed analysis, the following criteria are suggested:
			1. for flexible and rigid pavements, occasional movements by aircraft with ACR not exceeding 10 per cent above the reported PCR should not adversely affect the pavement;
			2. the annual number of overload movements should not exceed approximately 5 per cent of the total annual aircraft movements, excluding light aircraft.
		4. Such overload movements should not normally be permitted on pavement exhibiting signs of distress or failure. Furthermore, overloading should be avoided during any periods of thaw following frost penetration, or when the strength of the pavement or its subgrade could be weakened by water.
		5. Where overload operations are conducted, the appropriate authority should review the relevant pavement condition regularly, and should also review the criteria for overload operations periodically since excessive repetition of overloads can cause severe shortening of pavement life or require major rehabilitation of pavement.
		6. For convenience, a dedicated software is available on the ICAO website, for computing any aircraft ACRs at any mass on rigid and flexible pavements for the four standard subgrade strength categories detailed in Regulation 70 (6) b.
 | Current 19 is applicable until 27 November 2024. Insert new text Applicable as of 28 November 2024 |

***Table 8 Dimensions and slopes of the obstacle protection surface***

|  |  |
| --- | --- |
|  | Runway type/code number |
|  | Non-instrumentCode number | InstrumentCode number |
| Surface dimensions | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Length of inner edge | 60 m | 80 m~~a~~ | 150 m | 150 m | 150 m | 150 m | 300 m | 300 m |
| Distance from the visual approach slope indicator system~~e~~b | D~~1~~1+30 m | D~~1~~1+60 m | D~~1~~1+60 m | D~~1~~1+60 m | D~~1~~1+60 m | D~~1~~1+60 m | D~~1~~1+60 m | D~~1~~1+60 m |
| Divergence (each side) | 10% | 10% | 10% | 10% | 15% | 15% | 15% | 15% |
| Total length | 7 500 m | 7 500 m~~b~~ | 15 000 m | 15 000 m | 7 500 m | 7 500 m~~b~~ | 15 000 m | 15 000m |
| *Slope* |  |  |  |  |  |  |  |  |
| (a) PAPI~~d~~a | – | A–0.57° | A–0.57° | A–0.57° | A–0.57° | A–0.57° | A–0.57° | A–0.57° |
| (b) APAPI~~d~~a | A–0.9° | A–0.9° | – | – | A–0.9° | A–0.9° | – | – |
|  ~~(c) No slope has been specified if a system is unlikely to be used on runway type/code number indicated.~~(~~d~~a) Angles as indicated in Figure 20.(~~d~~b) D1 is the distance of the visual approach slope indicator system from threshold prior to any displacement to remedy object penetration of the OPS (refer Figure 19). The start of the OPS is fixed to the visual approach slope indicator system location, such that displacement of the PAPI results in an equal displacement of the start of the OPS. See Sub~~section~~ regulation (5) e). |