



**REPUBLIC INDONESIA  
MINISTRY  
OF  
TRANSPORTATION**

**CIVIL AVIATION SAFETY REGULATION  
(CASR)**

**PART 139  
AERODROME**

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# **CIVIL AVIATION SAFETY REGULATIONS**

## **(C.A.S.R.)**

### **PART 139**

### **AERODROME**

**REPUBLIC OF INDONESIA**  
**MINISTRY OF TRANSPORTATION**

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## SUBPART 139A General

### 139.001 Applicability

CASR Part 139 deals with the operation of aerodromes and includes rules about the following matters:

- a. certification of aerodromes;
- b. requirements that apply to operators of certified aerodromes, including matters associated with an aerodrome manual;
- c. exemptions to compliance with regulatory rules;
- d. reporting officer and safety inspection requirements that apply to operators of certain other aerodromes used for non commercial airline.

### 139.003 Definitions

In Part 139 the following terms have defined meanings:

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

**Aerodrome certificate**, a certificate issued by the DGCA under Subpart B of these regulations for operation of an aerodrome.

**Aerodrome facilities and equipment**, any facilities and equipment, inside or outside the boundaries of an aerodrome that are constructed or installed and maintained for the arrival, departure and surface movement of aircraft.

**Aerodrome manual**, a manual included in an application for aerodrome certificate pursuant to the regulations of this Part, including any amendments to the manual accepted by the DGCA.

**Aerodrome operator**, in relation to a certificated aerodrome, the holder of the Aerodrome Certificate for that aerodrome is the aerodrome operator.

**Apron**, a defined area on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading of passengers, mail or cargo, fuelling, parking or maintenance.

**Certified aerodrome**, an aerodrome whose operator has been granted an aerodrome certificate is a certified aerodrome.

**Heliport**, an aerodrome or defined area on a structure intended to be used wholly or in part for arrival, departure and surface movement of helicopters.

**Maneuvering area**, that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding apron(s), is called the maneuvering area.

**Manual of Standards**, the document called 'Manual of Standards - Part 139 Aerodromes' published by DGCA, as in force from time to time.

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

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

**Maximum carrying capacity**, in relation to an aircraft means the maximum passenger-seating capacity or the maximum payload permitted under the aircraft's certificate of type approval.

**Maximum passenger-seating capacity**, in relation to an aircraft means the maximum number of seats for passengers permitted under the aircraft's certificate of type approval.

**Movement area**, that part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s) is called the movement area.

**Obstacle**, in relation to an aerodrome, obstacle means all fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.

**Obstacle Free Zone (OFZ)**, in relation to an aerodrome, OFZ means the airspace above the inner approach surface, inner transitional surfaces, the balked landing surface and that portion of the runway strip bounded by these surfaces, that is not penetrated by any fixed obstacle other than a low-mass and frangible mounted one required for air navigation purposes.

**Obstacle Limitation Surfaces (OLS)**, a series of surfaces that define the volume of airspace at and around an aerodrome to be kept free of obstacles in order to permit the intended aero plane operations to be conducted safely and to prevent the aerodrome from becoming unusable by the growth of obstacles around the aerodrome.

**Runway Strip**, a defined area including the runway and stop way, if provided, intended to:

- a) reduce the risk of damage to aircraft running off a runway; and
- b) protect aircraft flying over it during take-off or landing operations.

**Safety Management System**, a system for the management of safety at aerodromes including the organizational structure, responsibilities, procedures, processes and provisions for the implementation of aerodrome safety policies by an aerodrome operator, which provides for control of safety at, and the safe use of, the aerodrome.



**Taxiway Strip**, an area including a taxiway intended to protect an aircraft operating on a taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway.

**Unserviceable Area**, a part of the movement area that is unfit and unavailable for use by aircraft.

**Waterbase**, an aerodrome or defined area on the water intended to be used wholly or in part for arrival, departure and surface movement of aircraft.

**Work Area**, a part of an aerodrome where maintenance or construction works are in progress.

### **139.005 Standards For Aerodromes**

Any reference in this Civil Aviation Safety Regulation to aerodrome standards and practices is a reference to the aerodrome standards and practices set out in the Manual of Standards Part 139 Aerodromes (MOS).

## **SUBPART 139B Aerodrome Certification**

### **139.007 Requirement For An Aerodrome Certificate**

1. A person must not operate an aerodrome to which subregulation (2) applies if the aerodrome is not a certified aerodrome.
2. An aerodrome shall be certified if it:
  - a. is used by aircraft engaged in international air transport operations; or
  - b. has a runway or landing area that is suitable and available for use by aircraft having a maximum passenger-seating capacity of more than 30 seats engaged in passenger or maximum take off weight more than 5.700kgs used for commercial airline.

### **139.009 Application For An Aerodrome Certificate**

1. A person may apply to DGCA for an Aerodrome certificate to permit that person to operate the aerodrome specified in the application.
2. An application must be in the approved form.
3. The application must be accompanied by one copy of the aerodrome manual if:
  - a. the aerodrome is used for international operations by any aircraft; or
  - b. the aerodrome has a runway or landing area that is suitable and available for use by aircraft having a maximum passenger-seating capacity of more than 30 seats engaged in passenger or maximum take off weight more than 5.700kgs used for commercial airline.

### **139.011 Grant Of An Aerodrome Certificate**

1. DGCA must grant an aerodrome certificate to an applicant if:
  - a. the aerodrome facilities, services and equipment are in accordance with the standards specified for a certified aerodrome in the Manual of Standards Part 139- Aerodromes; and
  - b. the aerodrome operating procedures make satisfactory provision for the safety of aircraft; and
  - c. an aerodrome manual that contains all relevant information for the aerodrome has been prepared and is in accordance with the requirements of regulation 139.033; and
  - d. the DGCA is satisfied that the applicant would be able properly to operate and maintain the aerodrome.
  - e. the aerodrome operator must start to implement an acceptable aerodrome safety management system:
    - 1) With effect from 1 January 2010 for international aerodromes;
    - 2) With effect from 1 Januari 2011 for certified aerodrome.
2. When DGCA assesses an application and decides to issue a certificate, it will
  - a. tell the applicant, in writing, that the aerodrome is certified; and
  - b. publish details of the aerodrome in Aeronautical Information Publication (AIP) Indonesia.

### **139.013 Notice Of Refusal To Grant An Aerodrome Certificate**

If DGCA refuses to grant an aerodrome certificate to an applicant, the applicant must be given written notice of the refusal, and the reasons for it, no later than 14 days after DGCA refuses to grant the certificate.

### **139.015 Aerodrome Certificate May Be Subject To Conditions**

1. DGCA may grant an aerodrome certificate subject to any condition that DGCA considers necessary in the interests of aviation safety.
2. If DGCA decides to grant an aerodrome certificate subject to a condition, DGCA must give the applicant written notice of the reasons for the decision.
3. A condition must be set out on the certificate or in the written notice given to the applicant under Subregulation (2).
4. An aerodrome operator must not contravene a condition of the operator's aerodrome certificate.

### **139.017 Aerodrome Certificate Not Transferable**

An aerodrome certificate is not transferable.

### **139.019 Duration Of An Aerodrome Certificate**

1. An aerodrome certificate remains in force for 5 (five) years unless it is cancelled.
2. An aerodrome certificate is not in force during any period during when it is suspended by DGCA.

### **139.021 Suspension Or Cancellation Of An Aerodrome Certificate**

1. DGCA may, by written notice given to the holder of an aerodrome certificate, suspend or cancel the certificate if there are reasonable grounds for believing that:
  - a. a condition to which the certificate is subject has been breached; or
  - b. the aerodrome facilities, equipment, operations or maintenance are not of the standard necessary in the interests of the safety of air navigation; or
  - c. the holder has failed to comply with regulation 139.011.
2. Before suspending or canceling an aerodrome certificate, DGCA must:
  - a. explain facts and circumstances that, in the opinion of DGCA, would justify the suspension or cancellation, and DGCA would:
    - 1) gives the certificate holder chance to explain; and
    - 2) invites the certificate holder to show cause, in writing, within 30 days after the date of the notice, why the certificate should not be suspended or cancelled; and
  - b. take into account any written submissions that the certificate holder makes to DGCA within the time allowed under Part 139.019 (2).

### **139.023 Cancellation Of An Aerodrome Certificate At Request Of Holder**

1. If an aerodrome certificate holder wishes to surrender the certificate, the holder must give DGCA not less than 30 (thirty) days written notice of the date on which the holder nominates the certificate surrender to be effective.
2. DGCA must cancel the aerodrome certificate on the date specified in the notice and arrange for:
  - a. the cancellation to be notified by NOTAM; and
  - b. details about the aerodrome to be removed from Aeronautical Information Publication (AIP).

### **139.025 Temporary Aerodrome Certificate**

1. DGCA may grant a temporary aerodrome certificate to an applicant if DGCA is satisfied that the applicant will be able to properly operate and maintain the aerodrome for the duration of the temporary certificate.

2. A temporary aerodrome certificate must not be granted for a period longer than 60 (sixty) days.
3. When DGCA assesses an application and decides to issue a certificate, it will:
  - a. tell the applicant, in writing, that the aerodrome is certified; and
  - b. publish details of the aerodrome in Aeronautical Information Publication (AIP) Indonesia.

## **SUBPART 139C            Aerodrome Manual**

### **139.027    Preparation Of Aerodrome Manual**

An aerodrome operator subject to the provisions of subregulation 139.009 (3) must have an aerodrome manual for the aerodrome in accordance with the requirements of this subpart.

### **139.029    Form Of Aerodrome Manual**

1. The aerodrome manual shall be a formal document that is :
  - a. signed by the aerodrome operator;
  - b. typewritten or printed;
  - c. organized in a format that is easy to revise to facilitate preparation, review and amendment;
  - d. produced in a manner that provides a system for denoting:
    - 1) the currency of pages and amendments there to;
    - 2) action taken to insert amendments to the manual; and
    - 3) a historical record of changes to the document.
2. The manual may consist of more than one document. Where the manual consists of more than one document, each one shall be cross-referenced to the other documents.
3. Additional copies of the manual may be kept in an electronic form.

### **139.031    Location Of The Aerodrome Manual**

1. An aerodrome operator must keep at least one complete and current copy of the aerodrome manual for the aerodrome at the aerodrome in a printed form.
2. An aerodrome operator must provide the DGCA with a complete and current copy of the aerodrome manual.
3. An aerodrome operator must make the copy of the manual referred sub regulation (1) available for inspection on request by a DGCA authorized person or inspector.

### **139.033 Information To Be Included In An Aerodrome Manual**

1. The aerodrome operator shall include at least the following particulars in the aerodrome manual as set out in Appendix 1 of CASR 139, to the extent they are applicable to the aerodrome, under the following Sections:
  - a. Section 1 – General Information,;
  - b. Section 2 – Particulars of the Aerodrome Site;
  - c. Section 3 – Particulars of the aerodrome required to be reported to the Aeronautical Information Service;
  - d. Section 4 – Particulars of the aerodrome operating procedures and safety measures; and
  - e. Section 5 – Aerodrome Administration and Safety Management System.
2. If particular information referred sub regulation (1) is not included in the manual because it is not applicable to the aerodrome, the aerodrome operator shall include in the aerodrome manual a statement to the effect that the information is not applicable and include the reason for the non-applicability with the risk assessment.
3. If DGCA issues an exemption under regulation 139.099, the aerodrome operator shall include in the aerodrome manual at least the following information in relation to each exemption:
  - a. The identification number allocated by DGCA for each exemption;
  - b. The date that each exemption came into effect; and
  - c. Any conditions, restrictions or procedures to which the exemption is subject.

### **139.035 Amendment Of An Aerodrome Manual**

1. An aerodrome operator must amend the aerodrome manual whenever necessary to maintain the accuracy of information provided in the manual.
2. The DGCA may direct, in writing, an aerodrome operator to amend an aerodrome manual in accordance with such directive according to amendment MoS 139 in order to maintain accuracy of the manual.

### **139.037 Notification of amendment of an aerodrome manual**

An aerodrome operator must notify DGCA, in writing, of any amendment that the operator makes to the aerodrome manual for the aerodrome within 14 (fourteen) days after the amendment is made.

### **139.039 Aerodrome Manual Controller**

1. An aerodrome operator must appoint a person to be the controller for the aerodrome manual.
2. The functions of the aerodrome manual controller are to ensure that:

- a. a record is kept of the persons who hold copies of the whole or a part of the aerodrome manual; and
- b. updates of information for the manual are distributed to those persons.

#### **139.041 Status Of The Aerodrome Manual**

The DGCA shall accept an aerodrome manual and amendments there to provide the preceding requirements of this part have been satisfied.

### **SUBPART 139D Obligations Of An Aerodrome Operator**

#### **139.043 Compliance With Standards And Practices**

An aerodrome operator shall comply with the relevant standards and practices specified in the Manual of Standards and with any conditions notified by the DGCA in writing.

#### **139.045 Competence Of Aerodrome Personnel**

1. An aerodrome operator and service providers in the aerodrome shall employ an adequate number of skilled and qualified personnel to perform all critical activities for aerodrome operation and maintenance.
2. The personnel referred to sub regulation (1) shall have a certificate of competence from training agency which already accredited by DGCA and license issued by DGCA.
3. The aerodrome personnel referred to sub regulation (1) consist of:
  - a. personnel of airport technical;
  - b. personnel of airport electronically;
  - c. personnel of airport electrical;
  - d. personnel of airport mechanical;
  - e. personnel of apron movement control;
  - f. personnel of ground support equipment;
  - g. air marshal;
  - h. personnel of aerobridge;
  - i. personnel of management and monitoring of airport environment;
  - j. personnel of fire fighting services and aircraft rescue;
  - k. personnel of salvage; and
  - l. personnel of helicopter (helicopter landing officer).
4. DGCA must issue the license referred to sub regulation (2) if the aerodrome personnel fulfill the requirement of:
  - a. administration;

- b. healthy;
  - c. has certificate of competence; and
  - d. pass the examination.
5. The licensed aerodrome personnel referred to sub regulation (5) has obligation:
    - a. obey and comply regulation (CASR);
    - b. bring the license at work and show to the DGCA officer if asked;
    - c. do the job as per their competency;
    - d. maintain his/her capability; and
    - e. check their healthy periodically.
  6. The licensed aerodrome personnel who do not comply obligation under sub regulation (6) get administration sanction:
    - a. warning;
    - b. suspend the license; and/or
    - c. cancel the license.
  7. License from other counties is valid through validation process by DGCA.

#### **139.047 Training Of Aerodrome Personnel**

1. The operator of a certified aerodrome must ensure that all personnel of the operator are trained in accordance with the standards for training aerodrome personnel set out in the Manual of Standards or other standard issued by DGCA.
2. Training of aerodrome personnel is conducted Indonesia legal entity which already accredited by DGCA.
3. The requirements to get accreditation referred to sub regulation (2) are:
  - I. Administration
    - a. Foundation act (establishment deed);
    - b. NPWP;
    - c. Nomor Pengukuhan Pengesahan Kena Pajak (NPPKP);
    - d. Letter of resident;
    - e. Surat Izin Usaha Perdagangan (SIUP).
  - I. Material
    - a. Syllabus or curriculum training;
    - b. List of instructor qualification;
    - c. List of facilitation in theory and practice;
    - d. Guidance of training.
4. Training institution which breach subregulation (3) get administration sanction:
  - a. warning;
  - b. suspend the license; and/or

- c. cancel the license.

#### **139.049 Reporting Officer**

1. The operator of a certified aerodrome must appoint one or more reporting officers for the aerodrome.
2. The functions of a reporting officer are:
  - a. to monitor the serviceability of the aerodrome;
  - b. to report accident and incident caused by bird strike to DGCA to be sent to ICAO;
  - c. to report to the NOTAM Office and air traffic control as appropriate any changes in conditions, or any other occurrences, at the aerodrome that must be reported under subregulation 139.085.
  - d. to send in writing the information of changes referred subregulation (2) (c) to AIS for publication in AIP.
  - e. to clarify the changes data in AIP to be reported back to AIS.
3. The operator must shall give an adequate training for reporting officer.

#### **139.051 Aerodrome Operation And Maintenance**

The operator of a certified aerodrome shall ensure that the aerodrome is operated and maintained with a reasonable degree of care and diligence.

#### **139.053 Aerodrome manual procedures**

1. Subject to any directions issued by DGCA, an aerodrome operator shall operate and maintain the aerodrome in accordance with the procedures set out in the aerodrome manual including to prevent runway incursion, unless any procedure issued by DGCA.
2. DGCA may direct the operator of a certified aerodrome to change the procedures set out in the aerodrome manual, if DGCA considers it necessary in the interests of the safety of aircraft.
3. An operator must comply with a direction given to the operator under subregulation 139.81 (2).

#### **139.055 Notice Of Deviation**

1. This regulation applies if a deviation from a procedure set out in the aerodrome manual including Runway End Safety Area (RESA) and runway strip, for a certified aerodrome is made to ensure the safety of aircraft by risk assessment and the mitigation procedure.
2. The operator of the aerodrome must tell DGCA, in writing, of the deviation within 30 days after the deviation was made.



### **139.057 Aerodrome Markings**

1. The operator of a certified aerodrome must mark the following areas of the aerodrome in accordance with the standards set out in the Manual of Standards:
  - a. the movement area;
  - b. any unserviceable area;
  - c. any works area on or near the movement area.
2. The operator must ensure that all aerodrome markings are maintained in accordance with the standards set out in the Manual of Standards.

### **139.059 Signal Area**

1. The operator of a certified aerodrome that does not have a continuous air traffic service provided by air traffic control during the day must provide a signal area in accordance with the standards set out in the Manual of Standards.
2. The operator of a certified aerodrome must display an appropriate signal in the signal area in any circumstances set out in the Manual of Standards that require such a signal to be displayed.
3. The operator of a certified aerodrome must ensure that the signal area and any signal displayed in it are clearly visible to any aircraft intending to use the aerodrome.

### **139.061 Wind Direction Indicators — General**

The operator of a certified aerodrome must, in accordance with the standards for wind direction indicators set out in the Manual of Standards, install and maintain at least 1 wind direction indicator at the aerodrome.

### **139.063 Wind Direction Indicators — Requirement For Certain Runways**

1. If a runway at a certified aerodrome is used in non-precision approach operations, the operator of the aerodrome must ensure that there is a wind direction indicator near the end or ends of the runway at which instrument non-precision approach operations can be conducted.
2. DGCA may exempt the operator from compliance with subregulation (1) only if DGCA is satisfied that surface wind information is passed to the pilots of aircraft approaching the runway by:
  - a. an automatic weather observing system that:
    - 1) is compatible with aviation weather observing systems; and
    - 2) provides surface wind information through an aerodrome weather information broadcast; or

- b. an approved observer having a communication link with pilots through which timely information about surface wind can be clearly passed to pilots; or
- c. any other approved means of providing surface wind information.

### **139.065 Visual Approach Slope Indicator System**

1. The operator of a certified aerodrome must, in accordance with the standards for visual approach slope indicator systems set out in the Manual of Standards, provide an approved visual approach slope indicator system for the end of a runway at the aerodrome if that end is regularly used as the approach end for jet-propelled aircraft conducting passenger air transport operations.
2. DGCA may direct the operator of a certified aerodrome to provide an approved visual approach slope indicator system for the approach end or ends of a runway to which subregulation (1) does not apply, if DGCA considers it necessary in the interests of the safety of air navigation.
3. The operator must comply with a direction given to the operator under subregulation 139.93 (2).

### **139.067 Lighting of Movement Area**

1. At certified aerodrome where the operator intends an aircraft to land or take-off at night, or in less than VMC during the day, the aerodrome operator must provide and maintain a lighting system for the movement area of the aerodrome that is in accordance with subregulations (2) and (3).
2. The lighting system must include :
  - a. lighting of runways, taxiways and aprons intended for use at night or less than VMC during the day; and
  - b. lighting of at least 1 wind direction indicator;
  - c. lighting of obstacle within the movement area;
  - d. if the aerodrome has a runway intended to serve category I, II or III precision approach operations – approach, runway and taxiway lighting for the runway and taxiway.
3. A lighting system at a certified aerodrome must:
  - a. meet the standards specified in the Manual of Standards; or
  - b. Otherwise be approved by DGCA.

### **139.069 Checking Of Lighting Systems**

1. The operator of a certified aerodrome must not put a new lighting system of a kind mentioned in subregulation (3) into service at the aerodrome if both of the following requirements are not met :

- a. an electrical engineer or a licensed electrician has checked the system for compliance with any applicable electrical specifications and technical standards set out in the Manual of Standards; and
  - b. a flight check of the system has been conducted.
2. If checking compliance with a specification requires the use of survey instruments, the operator must ensure that the checking is done by a person with experience and competence in surveying that is acceptable to CASA.
  3. For subregulation (1), the kinds of lighting systems are as follows:
    - a. an approach lighting system;
    - b. a runway lighting system for instrument approach runways; and
    - c. a visual approach slope indicator system for jet-propelled aircraft (other than a system intended for use on a temporary basis for a period not longer than 30 days).

### **139.071     Airport Emergency Plan**

1. The airport emergency committee must prepare an airport emergency plan.
2. The plan must include:
  - a. procedures for coordinating the responses of all emergency service organizations referred to in the plan; and
  - b. any other matters that are required by the Manual of Standards to be included in the emergency plan.
3. The committee must review the emergency plan at least once a year and make any changes to the plan that are necessary to ensure that it operates properly.
4. The review must be carried out in consultation with the emergency service organizations referred to in the emergency plan.
5. As soon as practicable after an emergency exercise has been carried out, or if an emergency has occurred as soon as practicable after the emergency, the aerodrome operator must arrange for the committee to:
  - a. review the effectiveness of the responses to the exercise or the emergency; and
  - b. assess the adequacy of the emergency plan to deal with emergencies at the aerodrome; and mentioned in subregulation (3) into service at the aerodrome unless both of the following requirements are satisfied :
    - 1) a flight check of the system has been conducted; and
    - 2) take such corrective action as is necessary to ensure that the plan operates properly.
6. The operator must ensure that :
  - a. records of each review of the emergency plan carried out under this regulation are made; and

- b. each record is retained for at least 3 years after the review to which the record relates was carried out.

#### **139.073 Airport Emergency Committee**

1. An aerodrome operator who is obliged to produce an aerodrome manual must establish an airport emergency committee.
2. The committee must include a representative from any fire, police, medical or other emergency service that, having regard to the location of the airport, would be likely to be asked to assist if there were an emergency at the airport.

#### **139.075 Testing Of Airport Emergency Plan**

1. Subject to this regulation, an aerodrome operator must conduct a full-scale emergency exercise at least once every 2 years to test:
  - a. the coordination of the emergency service organisation referred to in the airport's emergency plan; and
  - b. the adequacy of the procedures and facilities provided for in the plan.
2. If a real emergency occurs at the aerodrome within 6 months before an emergency exercise is due, the operator may ask DGCA to extend the period within which the next full-scale emergency exercise must be conducted.
3. DGCA must grant the request if it is satisfied that:
  - a. all emergency service organization referred to in the plan responded to the real emergency; and
  - b. the real emergency adequately tested the plan.
4. In granting the request, DGCA may extend the period for a full-scale exercise until the end of 2 years after the real emergency occurred.
5. An aerodrome operator must conduct a partial emergency exercise in the intervening year between full-scale exercises (or real exercises, if applicable) to ensure any deficiencies found during the full-scale exercise have been corrected.
6. The airport emergency plan shall observe human factor principles to ensure optimum response by all participating agencies.

#### **139.077 Aerodrome Safety Management System**

1. The operator of an certified aerodrome shall implement Aerodrome Safety Management System minimal consist of
  - a. Safety policy and objective;
  - b. Safety risk management;
  - c. Safety assurance;
  - d. Safety promotion.

2. Starting implementation of aerodrome safety management system in place no later than:
  - a. 1 January 2010 for international airport;
  - b. 1 January 2011 for domestic certified airport.
3. The safety management system must comply with the standards and guidance issued by DGCA.
4. Safety management system under subregulation (1) in operation shall require all users of the aerodrome, including those that perform activities independently at the aerodrome in relation to flight or aircraft handling, to cooperate in the program to promote safety at, and the safe use of, the aerodrome by immediately informing it of any accidents, incidents, defects or faults which have a bearing on safety.
5. In every plan of changes facilities, the aerodrome operator shall do risk assessment and mitigation process in the ALARPs (As Low As Reasonably Practicable) principle, before execute the plan.

#### **139.079 Aerodrome Serviceability Inspections**

1. An aerodrome operator is to ensure that aerodrome serviceability inspections are performed in accordance with all applicable standards set out in the Manual of Standards.
2. An ***aerodrome serviceability inspection*** is an inspection of the aerodrome to confirm it is safe for aircraft operations.
3. The aerodrome operator must also ensure an aerodrome serviceability inspection is conducted:
  - a. after a gale, storm or other severe weather;
  - b. at any time that air traffic control or DGCA requires the inspection; and
  - c. as soon as practicable after any aircraft accident or incident occurs on the aerodrome.

#### **139.081 Aerodrome Safety Inspections**

1. The operator of certified aerodrome shall arrange for a safety inspection of the aerodrome to be conducted at least once each year.
2. The safety inspection must be conducted by DGCA staff member or a person or institution approved by DGCA.
3. The person conducting the safety inspection must give the operator a written report that:
  - a. deals with the matters set out in Appendix 4; and

- b. specifies any remedial work that is necessary for the aerodrome to comply with the applicable standards.
- 4. Within 30 days after receiving the report, the operator must give to DGCA :
  - a. copy of the report; and
  - b. (b) if the report specifies any remedial work as being necessary — a statement as to when and how the operator intends to do the remedial work.

#### **139.083 Aerodrome Operator's Internal Safety Audits**

1. An aerodrome operator who has an aerodrome safety management system in operation shall arrange for an audit of the aerodrome safety management system, including an inspection of the aerodrome facilities, services and equipment. The audit inspection shall cover the aerodrome operator's own functions and assess:
  - a. the currency and accuracy of information published in AIP; and
  - b. the relevance, currency and accuracy of operating procedures specified in the aerodrome manual.
2. The audit referred to in 139.079 (1) shall be conducted once in each calendar year, unless directed otherwise by DGCA.
3. The audit shall comply with all applicable standards set out in the Manual of Standards.
4. An aerodrome operator must ensure that a person or persons with appropriate technical qualifications and experience perform any aerodrome audit and inspection.
5. The aerodrome operator shall ensure that audit and inspection reports are prepared and signed by the persons who conducted the audit or inspection and that the reports are retained for a period of at least three years.

#### **139.085 Planning And Execution Of Aerodrome Works**

1. An aerodrome operator must ensure that any aerodrome works at the aerodrome are carried out in a way that does not create a hazard to aircraft, or confusion to pilots and also conduct risk assessment and mitigation for the hazard.
2. An aerodrome operator must comply with the standards set out in the Manual of Standards in relation to planning and notice requirements that must be satisfied before aerodrome works may be carried out.

#### **139.087 Access To Aerodromes**

1. An aerodrome operator must allow personnel authorized by DGCA to inspect and conduct tests of aerodrome facilities, equipment or operating procedures at the aerodrome for the purpose of ensuring the safety of aircraft.

2. The aerodrome operator shall, as requested by a person referred to in 139.109 (1), allow access to any part of the aerodrome or any aerodrome facilities, equipment, personnel, documents or records for the purposes of subregulation (1).

#### **139.089 Notification and reporting**

1. An aerodrome operator must comply with the provisions of this regulation and report to DGCA, air traffic control or pilots the items specified in subregulation (2) to (6). The time limits specified for reporting must be complied with.
2. An aerodrome operator shall give notice to the air traffic control unit and DGCA within 14 days of any temporary or permanent planned change in the physical condition of the aerodrome that may affect the safety of aircraft. Any temporary or permanent planned change in the physical condition must be with the risk assessment and mitigation procedure.
3. To maintain the accuracy of the information published in AIP regarding an aerodrome the operator shall advise AIS, in writing, as soon as practicable of any change required to that information (other than a change that is published in NOTAM).
4. Subject to the requirement of 139.083 (6), an aerodrome operator shall ensure immediate notice is given to air traffic control detailing the following circumstances of which the operator has knowledge:
  - a. any projection by an object through an obstacle limitation surface relating to the aerodrome; and
  - b. the existence of an obstruction, hazardous condition or any other occurrence that may affect aviation safety at or near the aerodrome; and
  - c. any reduction in the level of service at the aerodrome as set out in any AIS publication; and
  - d. any closure of any part of the maneuvering area of the aerodrome
5. If the aerodrome is not a controlled aerodrome, the notice must also be given to the nearest air traffic control unit.
6. When it is not feasible for the aerodrome operator to ensure the immediate notification of information in accordance with 139.083 (4) or (5), the operator must give immediate notice to pilots who may be affected in the circumstances.

#### **139.091 Establishment of obstacle limitation surfaces**

An aerodrome operator must ensure that obstacle limitation surfaces are established for the aerodrome in accordance with the standards set out in the Manual of Standards.

### **139.093     Monitoring of airspace**

1. An aerodrome operator must monitor the airspace around the aerodrome for infringement of the obstacle limitation surfaces by any object, building or structure.
2. The monitoring must be in accordance with the standards set out in the Manual of Standards.
3. An aerodrome operator must take all reasonable measures to ensure that obstacles at, or within the vicinity of, the aerodrome are detected as quickly as possible.

### **139.095     Notice of obstacles**

If an aerodrome operator becomes aware of the presence of an obstacle, the operator must immediately advise air traffic control giving details of the height and location of the obstacle and amended runway declared distances if applicable.

### **139.097     Preventing of Runway Incursion**

To prevent runway incursion, an aerodrome operator shall:

1. has personnel or organization which responsible in preventing runway incursion.
2. Ensure all aerodrome facilities physically help to decrease entry error to runway by pilot or airside driver.
3. Implement aerodrome safety management system referred 139.077 to ensure runway safety.
4. Ensure all sign, marking and lighting maintain in good visibility, adequate, and not confusing user in all operation condition as Manual of Standards.
5. Communicate information about temporary work areas in construction and maintenance to all related parties, and ensure all temporary sign and marking as standards in good visibility and not confusing user in all operation condition.
6. Conduct formal training and assessment program for airside driver.
7. Conduct formal communication training and assessment to airside driver and worker around runway.
8. Conduct training and aerodrome familiarization to pilot, air traffic controller, airside driver to get input and feedback to prevent runway incursion.
9. Report runway incursion and investigate further to identify specific cause and other contributory factors.



## **SUBPART 139E**

## **Exemptions**

### **139.099 Exemptions**

1. DGCA may, by instrument in writing, exempt an aerodrome operator from compliance with specific provisions of this Part.
2. Before exempting an aerodrome operator, DGCA must take into account any relevant considerations relating to the interests of the safety of air navigation, and the aerodrome operator reporting for safety risk assessment and mitigation procedure.
3. An exemption is subject to the operator complying with any conditions that DGCA specifies in the instrument as being necessary in the interests of the safety of air navigation.
4. The operator must comply with a condition specified in the instrument.
5. If an aerodrome operator is unable to comply with a standard specified in the Manual of Standards, the DGCA shall require the aerodrome operator to assess safety risk and carry out aeronautical studies, whether alternative conditions and procedures may be prescribed to ensure a level of safety equivalent to that established by the relevant standard.
6. After getting written approval for subregulation (5) from DGCA, the aerodrome operator shall report to AIS for publication in the AIP.

## **SUBPART 139F**

## **Registered Aerodrome**

### **139.101 Definitions**

Registered Aerodrome, an aerodrome has a runway or landing area that is suitable and available for use by aircraft having a maximum passenger-seating capacity 30 seats engaged in passenger or maximum take off weight 5.700kgs including heliport/helideck and waterbase, serving commercial airline, whose operator has applied for and been granted registration by DGCA is a registered aerodrome.

### **139.103 Application for registration of aerodrome**

1. The operator of an aerodrome, having runway or landing area that is suitable and available for use by aircraft having a maximum passenger-seating capacity 30 seats engaged in passenger or maximum take off weight 5.700kgs including heliport/helideck and waterbase used for commercial airline, (other than a aerodrome to which regulation 139.007 applies) may apply to DGCA for registration of the aerodrome.
2. An application must be in the approved form and must be accompanied by :
  - a. the information about the aerodrome required by Appendix 3a, Appendix 3b, Appendix 3c, and

- b. a written statement, signed by a person approved by DGCA, to the effect that :
    - 1) the person has conducted a safety inspection of the aerodrome, and
    - 2) the aerodrome meets the applicable standards referred to regulation 139.109 for aerodromes and is safe for operation, and
  - c. The name or names of the person or persons who are to be the reporting officers for the aerodrome
3. For the purposes of this subpart, DGCA may consider a person meeting the condition specified in Appendix 5 as acceptable to perform a safety inspection of a registered aerodrome and sign a statement to confirm compliance with applicable safety standards.

### **139.105 Registration of Aerodrome**

DGCA must, if the operator of an aerodrome has applied for registration of the aerodrome in accordance with regulation 139.103:

- a. Register the aerodrome by entering the following information about the aerodrome in the aerodrome register:
  - 1) The name of the aerodrome or heliport/helideck or waterbase;
  - 2) The details of the location of the aerodrome;
  - 3) The name and address of the operator;
- b. Tell the operator, in writing that the aerodrome is registered, and
- c. Direct AIS to publish in AIP details of the registration and the information about the aerodrome required by Appendix 3a, Appendix 3b, Appendix 3c.

### **139.107 Notice Of Refusal To Register Aerodrome**

If DGCA refuse to register an aerodrome, heliport/helideck, or waterbase, DGCA must no later than 14 days after it refuse to register the aerodrome, give the operator of the aerodrome, heliport/helideck, or waterbase written notice of the refusal and the reasons for it.

### **139.109 Register**

- 1. DGCA must establish and keep, in the approved form, a register of aerodromes registered under this Subpart.
- 2. DGCA publish registered aerodrome or heliport/helideck or waterbase to members of the public at reasonable times and places and subject to reasonable conditions.
- 3. DGCA must alter the information recorded in the aerodrome register if that information is changed by the operator.

4. DGCA must correct the information in the aerodrome register if there is an error in that information.

#### **139.111 Duration Of Registration**

1. The registration of an aerodrome remains in force for 3 (three) years unless it is cancelled.
2. However, the registration is not in force during any period in which it is suspended.

#### **139.113 Cancellation Of Registration On Request**

1. If the operator of a registered wishes the registration of the aerodrome to be cancelled, the operator must give DGCA not less than 30 days written notice of the date on which the operator wishes the registration to be cancelled.
2. DGCA must cancel the registration on the date specified in the notice and arrange for :
  - a. The cancellation to be notified in NOTAM, and
  - b. Details of the registration and any other information about the aerodrome to be removed from AIP.

#### **139.115 Suspension Or Cancellation Of Registration By DGCA**

1. DGCA may, by written notice given to the operator of a registered aerodrome, suspend or cancel the registration of the aerodrome if there are reasonable grounds for believing that:
  - a. the aerodrome fails to meet any of the standards applicable to the aerodrome under regulation 139.117, or
  - b. the operator of the aerodrome has failed to comply with regulation 139.083,139.119-139.127
2. Before suspending or canceling the registration of an aerodrome, DGCA must :
  - a. Give to the operator a show cause notice that :
    - 1) Sets out the facts and circumstances that in the opinion of DGCA, would justify the suspension or cancellation, and
    - 2) Invites the operator to show cause, in writing, within 30 days after the date of the notice, why the registration should not be suspended or cancelled.
  - b. Take into account any written submissions that the operator makes to DGCA within the time allowed under subparagraph (a) (2)).

### **139.117     Applicable Standards For Registered Aerodromes or Heliport/Helideck**

The standards applicable to registered aerodromes are :

- a. The standards applicable to certified aerodromes in relation to the following matters :
  - 1) Physical characteristics of the movement area
  - 2) Obstacle limitation surfaces
  - 3) Aerodrome markings
  - 4) Lighting
  - 5) Wind direction indicators
  - 6) Signal circle and ground signals, and
- b. Any other standards set out in the Manual of Standards that are applicable to registered aerodromes.

### **139.119     Personnel Competency**

The operator of a registered aerodrome or heliport/helideck or waterbase shall employ personnel with capability and qualification appropriate with his/her field under subregulation 139.045.

### **139.121     Training for Personnel of registered aerodrome or heliport/helideck or waterbase**

The operator of a registered aerodrome or heliport/helideck or waterbase shall ensure their personnel have adequate training.

### **139.123     Reporting Officer**

1. The operator of a registered aerodrome or heliport/helideck or waterbase must appoint one or more reporting officers for the aerodrome.
2. The functions of a reporting officer are:
  - a. to monitor the serviceability of the aerodrome;
  - b. to report accident and incident caused by bird strike to DGCA to be sent to ICAO;
  - c. to report to the NOTAM Office and air traffic control as appropriate any changes in conditions, or any other occurrences, at the aerodrome that must be reported under subregulation 139.085.
  - d. to send in writing the information of changes referred to subregulation (2) (c) to AIS for publication in AIP.
  - e. to clarify the changes data in AIP to be reported back to AIS.

3. The operator must not appoint a person as a reporting officer if the person has not been trained, in accordance with the Manual of Standards, to perform the reporting officer's functions.

#### **139.125 Notice Of Changes In Information Published in AIP**

1. The operator of registered aerodrome or heliport/helideck or waterbase shall report any information changes to AIS.
2. Information in subregulation (1) must be in written to AIS to be published in AIP.
3. The operator of registered aerodrome or heliport/helideck or waterbase shall clarify the published information to report back to AIS for the validity.

#### **139.127 Safety Inspections**

1. This regulation applies to a registered aerodrome and heliport/helideck and waterbase that is used by an aircraft for commercial air transport.
2. The operator of the aerodrome or heliport/helideck or waterbase must arrange for a safety inspection of the aerodrome or heliport/helideck or waterbase to be conducted at least once each year.
3. The safety inspection must be conducted by DGCA staff or a person or Indonesia legal entity approved by DGCA.
4. The person or staff of Indonesia legal entity conducting the safety inspection must give the operator a written report that :
  - a. Deals with the matters set out in Appendix 4, and
  - b. Specifies any remedial work that is necessary for the aerodrome to comply with the applicable standards.
5. Within 30 days after receiving the report, the operator must give to DGCA :
  - a. a copy of the report, and
  - b. If the report specifies any remedial work as being necessary – a statement as to when and how the operator intends to do the remedial work.
6. The registration of aerodrome or heliport/helideck or waterbase will be cancelled or suspended if subregulation (2) is not done or based on the report, the aerodrome or heliport/helideck or waterbase not in a safe operation condition.

#### **139.129 Exemptions**

1. If the operator of aerodrome or heliport/helideck or waterbase does not comply Manual of Standards (MoS 139), the operator shall assess risk safety and aeronautical studies to ensure the safe aircraft operational.

2. After getting written approval from DGCA, result of subregulation (1) should be reported to AIS for AIP publication.

## **SUBPART 139G            Aerodrome for Non Commercial Airline**

### **139.131        Stipulation**

An aerodrome has runway or landing area that is suitable and available for use by aircraft having a maximum passenger-seating capacity 30 seats engaged in passenger or maximum take off weight 5.700kgs, including heliport/helideck and waterbase which serves non commercial airline.

### **139.133        Obligation**

An aerodrome operator under subregulation 139.131 has obligation to:

1. comply Manual of Standards (MoS 139);
2. have licensed airport personnel;
3. conduct airport safety inspection at least once in a year by staff DGCA or person or Indonesia legal entity appoint or approved by DGCA; and
4. report its operational activities to DGCA at least quarterly (once in 3 months).

## **SUBPART 139H            Aerodrome Rescue And Fire Fighting Services**

As a signatory to the Chicago Convention, Indonesia is obliged to require the provision of rescue and firefighting services of an adequate standard at certain classes of airports. (See generally section 9.2 of chapter 9 of Annex 14 to the Chicago Convention).

To satisfy that obligation, this Subpart requires operators of aerodromes where international air transport operations take place, or where specified levels of domestic air transport operations occur, to provide those services and sets out the standards that are to apply.

### **139.135        Applicability of this Subpart**

1. This Subpart applies to aerodrome rescue and firefighting services that are to be provided at aerodromes used for civilian air transport operations.
2. This Subpart sets out the operating and technical standards applicable to such a service.
3. This Subpart does not apply to any aerodrome rescue and firefighting service provided by a military organization.

### **139.137        Definitions**

In this Subpart:

**ARFFS** means aerodrome rescue and fire-fighting service.

**ARFFS operation** means an operation undertaken in carrying out a function mentioned in paragraph 139.175 (1) (a) or (b).

**ARFFS provider** for an aerodrome means the person or organization that provides ARFFS for the aerodrome.

**Category** of an aerodrome means its category worked out by the method set out in section 9.2 of chapter 9 of Annex 14 to the Chicago Convention.

**Manual of Standards** means the document called 'Manual of Standards (MOS) – Subpart 139.H' issued by DGCA as in force from time to time.

### **139.139 Functions of ARFFS**

1. The functions of an ARFFS for an aerodrome are:
  - a. to rescue persons and property from an aircraft that has crashed or caught fire during landing or take-off; and
  - b. to control and extinguish, and to protect persons and property threatened by, a fire on the aerodrome, whether or not in an aircraft.
2. Nothing in subregulation (1) prevents the ARFFS from performing fire control services or rescue services elsewhere than on an aerodrome, but the provider must give priority to operations mentioned in subregulation (1).

### **139.141 Acceptability of service provision**

1. A person must not provide an ARFFS at an aerodrome unless the service provided by that person has been accepted as suitable by DGCA.
2. At a certified aerodrome DGCA will determine suitability or otherwise of the ARFFS by way of aerodrome certification procedures initially and by way of subsequent continuing compliance assessment. The information provided in the aerodrome manual will provide the basis for such suitability determinations.

### **139.143 Issue of Manual of Standards**

1. DGCA may issue a Manual of Standards for this Subpart that provides for the following matters:
  - a. standards and criteria for an ARFFS;
  - b. standards relating to the procedures, systems and documents required for the provision of an ARFFS;
  - c. standards for facilities and equipment used to provide an ARFFS;
  - d. standards, including competency standards, minimum qualifications and training standards, for persons engaged in an ARFFS; and

- e. any matter required or permitted by the regulations to be provided for by the Manual of Standards.

#### **139.145 Effect of Manual of Standards**

1. If DGCA sets out, in the Manual of Standards, a way of complying with a requirement of this Subpart, an ARFFS provider who uses that way is taken to have complied with the requirement unless the contrary is shown.
2. DGCA may take the extent to which an ARFFS provider complies with the Manual into account in deciding whether the service provided by the provider is adequate.

#### **139.147 Requirements for ARFFS provider**

If these standards require any system or procedure, the ARFFS provider shall ensure the system or procedure exists and is used.

#### **139.149 Applicable standards and requirements**

1. For a certified aerodrome and registered aerodrome, the applicable standards and requirements means the standards and requirements for an ARFFS and its category set out in:
  - 1) Chapter 9 of Annex 14 to the Chicago Convention; and
  - 2) the Manual of Standards.
2. The operator aerodrome shall report their ARFFS category to AIS for AIP publication.
3. Before publication at AIP with subregulation (2), AIS with related unit shall verify the data.

#### **139.151 Inconsistency between Manual and chapter 9 of Annex 14**

If a requirement of the Manual of Standards, as it applies to any aerodrome, is inconsistent with a requirement of chapter 9 of Annex 14 to the Chicago Convention, as it applies to that aerodrome, the requirement of the Manual prevails to the extent of the inconsistency.

#### **139.153 Required Knowledge, Equipment And Expertise**

An ARFFS provider must have knowledge, equipment and expertise to deal with any hazard likely to arise during an aviation accident or incident, including any hazard mentioned in the Manual of Standards.

#### **139.155 Obligation To Maintain Service**

1. An ARFFS provider must ensure that the service is available during the period or periods published in AIP as the period or periods of its availability.



2. Subregulation (1) does not prevent the level of protection provided during predictable periods of reduced activity at the aerodrome from being reduced, within the limit allowed by Chapter 9 of Annex 14 to the Chicago Convention.

#### **139.157 Response Time**

An ARFFS must be able to meet the criteria for response time set out in Chapter 9 of Annex 14 to the Chicago Convention.

#### **139.159 Buildings And Facilities**

1. An ARFFS provider for an aerodrome must ensure that the necessary buildings and facilities for the service, including the following, are at the aerodrome:
  - b. a fire station with watch room;
  - c. communications facilities including fire station and air traffic controller and other vehicles;
  - d. facilities for the maintenance of vehicles and equipment;
  - e. training facilities;
  - f. storage facilities;
  - g. access facilities to cross airport border at end runway.
2. The ARFFS provider must ensure that buildings and facilities comply with any applicable requirements (including requirements as to location) in the Manual of Standards.
3. The ARFFS provider must ensure that there is a facility, in accordance with the requirements of the Manual of Standards, for replenishing the water supply of a fire fighting vehicle.
4. The ARFFS provider must ensure that there are the appropriate emergency roads on the aerodrome in accordance with the requirements of the Manual of Standards.
5. An ARFFS provider must ensure that there is a standby point for an emergency vehicle that will allow the vehicle to achieve the required response time required by the Manual of Standards.

#### **139.161 Notice Of Service Availability**

1. An ARFFS provider must ensure that notice is published in AIP of the hours during which the service is available.
2. If for some reason (such as an emergency on the aerodrome) it becomes temporarily impossible to provide an ARFFS to the standard required by this Subpart, the provider must tell the NOTAM Office will last longer than 24 hours and inform how long it will be in full service.

3. Where the ARFFS is established at a certified aerodrome, the aerodrome operator is required to ensure a suitable procedure is contained within the Aerodrome Manual to notify DGCA.
4. For a registered aerodrome, the operator must establish a procedure of RFFS and notify to DGCA.

#### **139.163 Fire extinguishing agents**

1. There must be, on the aerodrome, a stock of fire-extinguishing agents of the kind or kinds, and meeting the performance standards, required by the applicable standards and requirements.
2. The fire-extinguishing agents under subregulation (1) must be held in at least the quantities:
  - a. the equivalent of 200% of the quantities of foam concentrate and complementary agent that are required to be held in rescue and fire fighting vehicles;
  - b. water availability is 400% from its ARFFS category.

#### **139.165 Fire Extinguishing Vehicles And Equipment**

1. There must be, on the aerodrome, vehicles and equipment for delivering extinguishing agent onto a fire.
2. There must be at least as many vehicles, and at least as much equipment, as required by the applicable standards and requirements.
3. Each vehicle or piece of equipment:
  - a. Must be capable of delivering extinguishing agent onto a fire at at least the rate required by the applicable standards and requirements; and
  - b. Must have at least the performance (in other respects) required by those standards and requirements.
4. The vehicles must carry ancillary equipment in accordance with the applicable standards and requirements.
5. Each vehicle and piece of equipment must be in good working order.
6. The vehicles must be of a color permitted by the applicable standards and requirements.
7. The provider must keep maintenance instructions for each vehicle and each piece of the equipment, including all the information necessary to permit an appropriately qualified and technically competent person to carry out maintenance, performance monitoring, defect reporting, fault reporting and record-keeping on or for the vehicle or equipment.

### **139.167 Other Vehicles And Equipment**

1. There must be, at the aerodrome, enough vehicles and equipment (other than vehicles and equipment for delivering extinguishing agent onto a fire) to provide the service, in accordance with the applicable standards and requirements.
2. The performance of the vehicles and equipment must be in accordance with the applicable standards and requirements.
3. The provider must tell DGCA in writing of any proposed reduction in the standard of service that:
  - a. of the reduction in the service; and
  - b. How long it is likely to be before the full service is restored.
4. The vehicles must carry ancillary equipment in accordance with the applicable standards and requirements.
5. The provider must keep maintenance instructions for each piece of the provider's equipment, including all the information necessary to permit a technically competent person to carry out maintenance, performance monitoring, defect reporting, fault reporting and record keeping on or for the equipment.

### **139.169 Vehicles And Equipment For Difficult Environments**

1. If a significant proportion of aircraft movements at the aerodrome take place over water, swamp or other difficult terrain environments, specialist rescue services and equipment for firefighting appropriate to the hazard and risk must be provided.
2. Any vehicles, boats and equipment must be in at least the numbers and quantity required by the applicable standards and requirements.
3. Any vehicles, boats and equipment must be of a color required or permitted by the applicable standards and requirements.

### **139.171 Commissioning Of New Vehicles And Equipment**

1. The provider must not put a new vehicle, or a new item of equipment that affects the quality or rate of discharge of extinguishing agent, into service unless:
  - a. the provider has confirmed in writing to DGCA that the vehicle or equipment conforms to all applicable specifications, standards and requirements, in accordance with the provider's operations manual; and
  - b. DGCA has acknowledged that the vehicle or equipment meets the applicable specifications, standards and requirements.
2. Any necessary personnel training has been completed

### **139.173 Commissioning Of Certain Equipment**

An ARFFS provider must not begin to use a piece of operational equipment for the purpose of an ARFFS unless the provider has confirmed in writing to DGCA that the equipment conforms with all applicable specifications, standards and requirements in the Manual of Standards.

### **139.175 Protective Clothing And Equipment**

At the aerodrome there must be, for the firefighters and rescue personnel:

- a. protective clothing that complies with any relevant internationally recognized standard in at least the quantity required by the applicable standards and requirements; and
- b. other protective equipment in the quantity required by, and of a kind in accordance with, those standards and requirements.

### **139.177 Communications**

1. There must be, on the aerodrome, sufficient communications equipment available to provide communication during an ARFFS operation.
2. The vehicles used for the service must carry suitable communications equipment.
3. A person who is required to operate the equipment must hold, as required, a license or certificate of a kind appropriate to the equipment.
4. The equipment must not interfere with communications equipment used by the air traffic service at the aerodrome.

### **139.179 Test and Maintenance Equipment**

1. The provider must have the necessary equipment and tools, in accordance with the applicable standards and requirements, to test and maintain the equipment used to provide the service.
2. If the applicable standards and requirements require particular test or maintenance equipment, particular kinds of test or maintenance equipment, or particular numbers or quantities of a particular type of test or maintenance equipment, the provider must have that equipment or that number or quantity of that type of equipment.

### **139.181 Number Of Operating Personnel**

1. An ARFFS provider must provide adequate number of licensed personnel.
2. During any period announced in AIP as a period during which ARFFS is available at an aerodrome, there must be enough trained personnel available at the aerodrome to operate the equipment and vehicles required to provide the service at full capacity.

3. Those personnel must be stationed at places that allow the ARFFS to respond to an emergency at least as quickly as required by the applicable standards and requirements.

#### **139.183 Medical Standard of Firefighters**

1. The people employed as firefighters must meet the medical standard for firefighters set out in the Manual of Standards.
2. There must be a system of continuing medical checks for the people employed as firefighters that ensures that the ARFFS provider knows whether or not those people continue to meet that standard.

#### **139.185 Qualifications and Training of Firefighters**

1. The people employed as firefighters must already be trained to at least the relevant specified standard.
2. Before being used in any operational capacity, those people must also receive, or have received, appropriate training in dealing with hazards specific to aviation accidents and incidents, to the extent that such training is not part of the relevant specified training.
3. The people employed as firefighters must receive training to familiarize them with local conditions.
4. The people employed as firefighters must receive ongoing training to ensure that they continue to meet required standards. For a certified aerodrome such training standards shall include live fire drills (including pressure-fed fuel fires) commensurate with the types of aircraft and rescue and fire fighting equipment in use.
5. If a significant proportion of aircraft movements at the aerodrome take place over water, swamp or another difficult environment, the firefighters must be appropriately trained to carry out their functions in that environment.
6. All training programs for ARFFS personnel shall include training in human performance including team co-ordination.

#### **139.187 Operations Manual**

1. There must be an operations manual for the service that complies with the relevant standards set out in the Manual of Standards.
2. The operations manual must include a chart showing the organization that provide services to the provider, setting out the roles and responsibilities of those organizations and how those roles and responsibilities affect the Aerodrome Emergency Procedures for the aerodrome concerned.
3. The operations manual must be kept up to date.

4. Each of the provider's employees must have ready access to an up-to-date copy of the operations manual.
5. The provider must give DGCA a copy of the operations manual, and provide details about any change to it within 14 days after the change.
6. There must be an up-to-date copy of the operations manual at each operational station.
7. The provider must comply with the requirements of the operations manual.

#### **139.189 Amendment Of Operations Manual**

1. An ARFFS provider may amend its operations manual.
2. DGCA may direct an ARFFS provider to amend its operations manual in a way specified in the direction.
3. The provider must comply with the direction.

#### **139.191 Voice Data Recording**

There must be a system to record electronically, in accordance with the standards or requirements set out in the Manual of Standards, any voice communication by radio or telephone in the course of an ARFFS operation.

#### **139.193 Record Of Accidents Or Incidents**

There must be a system, in accordance with the standards or requirements set out in the Manual of Standards, to record the details of any aircraft accident or incident, or building fire, in relation to which the service is required to take any action.

#### **139.195 Contingency Plan**

1. There must be a plan, in accordance with the standards or requirements set out in the Manual of Standards, of the procedures to be used in the event of an emergency that results, or may result, in the service being interrupted.
2. The plan must include at least the following:
  - a. Actions to be taken by firefighters and rescue personnel;
  - b. Possible alternative arrangements for providing the service (including arrangements for procuring any necessary replacement vehicles or spare parts, or supplies of extinguishing materials);
  - c. Notification procedures;
  - d. Procedures for re-establishing normal services.

### **139.197 Records Management**

1. There must be a system, in accordance with the standards or requirements set out in the Manual of Standards, to collect, index, store and maintain the records relating to the service.
2. The records must include:
  - a. voice records made; and
  - b. other (including photographic, still or video) records of accidents or incidents.
3. A record must be kept for 5 years (or a shorter period specified for the particular kind of record in the Manual) after the date to which it relates.

### **139.199 Organization**

1. The provider must, at all times, maintain an appropriate organization with a sound and effective management structure, having regard to the nature of the service it provides.
2. The provider must tell DGCA in writing:
  - a. who its managers are; and
  - b. its organizational structure; and
  - c. how many staff of each class it uses to provide the service.

### **139.201 System For Rectification Of Service Failures**

There must be a system, in accordance with the standards or requirements in the Manual of Standards, to rectify any failure that results or may result in an interruption in the service or a reduction in the standard of the service.

### **139.203 Quality Control**

There must be a system, in accordance with the standards or requirements set out in the Manual of Standards, to ensure that the service complies with the requirements of CASR 139 Subpart G.

### **139.205 Change Management**

There must be a system, in accordance with the Manual of Standards, to manage changes in:

- a. equipment and procedures; and
- b. what the service does; and
- c. the level or kinds of service provided; and
- d. the way the service is provided.

### **139.207 Safety Management**

1. There must be a safety management system for the service, in accordance with the standards or requirements in the Manual of Standards, including the policies, procedures and practices necessary to provide the service safely.
2. At an international aerodrome the safety management system is starting to be operational by 1 January 2010. At other aerodromes DGCA will specify when the safety management system is to be operational.

### **139.209 Notification About Changes to DGCA and Industry**

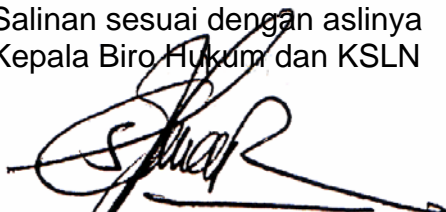
1. There must be a procedure, in accordance with the standards and requirements in the Manual of Standards, for an ARFFS provider to give, to aerodrome users, safety-related information about changes, faults or interruptions to the service.
2. The procedure must comply with DGCA requirements for reporting information to the Aeronautical Information and the NOTAM Office.
3. If the provider fails, for a period of 24 hours or longer, to provide the service at the standard required by 139.185, the ARFFS provider for the aerodrome must notify DGCA in writing as soon as practicable:
  - a. why the service is not being provided at that standard; and
  - b. how long it is likely to be before the service can be resumed; and
  - c. what action the service provider has taken and will take to resume the service at that standard.
4. The provider must tell DGCA in writing about any change in a matter mentioned in subregulation (3) (a), (b) or (c) within 14 days after the change.
5. For a certified aerodrome procedures for notification of changes are to be contained in the Aerodrome Manual.

**MINISTER FOR TRANSPORTATION**

ttd

**Ir. JUSMAN SYAFII DJAMAL**

Salinan sesuai dengan aslinya  
Kepala Biro Hukum dan KSLN



UMAR ARIS, SH, MM, MH  
Pembina Tk. I (IV/b)



## **APPENDIX 1**

### **Items To Be Included In An Aerodrome Manual**

The aerodrome manual for a certified aerodrome is to contain at least the information referred to for each section and subsection.

#### **Section 1 General**

This section of the aerodrome manual is to contain broad general information including at least the following matters:

- a. Purpose and scope of the aerodrome manual;
- b. Legal requirement for an aerodrome certificate and aerodrome manual as prescribed in CASR Part 139 – Aerodromes;
- c. Condition of use for the aerodrome, including a statement indicating compliance with Article 15 of the Chicago Convention, ie the aerodrome when available shall be so available to all persons on equal terms and conditions;
- d. The available Aeronautical Information System and procedures for its promulgation;
- e. The system for recording aircraft movements; and
- f. The obligations of the aerodrome operator.

#### **Section 2 Information about the aerodrome site**

For section 2, information is to be provided at least as follows:

- a. a plan of the aerodrome showing the main aerodrome facilities, including the wind direction indicators, for the operation of the aerodrome;
- b. a plan of the aerodrome showing the aerodrome boundaries;
- c. a plan showing the distance of the aerodrome from the nearest city, town or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and
- d. either:
  - 1) land certificate for the aerodrome site; or
  - 2) if the boundaries of the aerodrome are not defined in a land certificate, the details of control over the property on which the aerodrome is located, and a plan showing the boundaries and position of the aerodrome.

## **Section 3 Items About The Aerodrome To Be Reported To The Aeronautical Information Service (AIS)**

### **3.1 General Information**

For subsection 3.1 the required particulars are associated with the general information about the aerodrome, including :

- a. The name of the aerodrome;
- b. The name of the city the aerodrome serves;
- c. The location of the aerodrome, being the geographic coordinates of the aerodrome reference point determined in terms of the World Geodetic System -1984 (WGS-84) reference datum;
- d. The aerodrome elevation and geoid undulation;
- e. The elevation of:
  - 1) each threshold and the geoid undulation
  - 2) the elevation of the runway end and any significant high and low points along the runway; and
  - 3) the highest elevation of the touchdown zone of a precision approach runway.
- f. The aerodrome reference temperature;
- g. Details of the aerodrome beacon;
- h. The name of the aerodrome operator and the address and telephone numbers at which the aerodrome operator may be contacted at all times; and
- i. remarks about the aerodrome including:
  - 1) the hours of operation, if applicable;
  - 2) the available ground services;
  - 3) any special procedures; and
  - 4) any local information or precautions.

### **3.2 Aerodrome dimensions and related information**

For subsection 3.2 the required information is associated with information about the runway characteristics and dimensions, including : the following details for each runway at the aerodrome:

- a. the true bearing of the runway, the runway designation numbers, length, slope, location of displaced threshold if any, width, slope, surface type, type

of runway and existence of an obstacle free zone for applicable precision approach runways;

- b. length, width and surface type for runway strip, runway end safety areas and stopways;
- c. length, width and surface type of taxiways;
- d. apron surface type and aircraft stands;
- e. clearway length and ground profile;
- f. visual aids – approach lighting and type, visual approach slope indicator systems(s), marking and lighting for runways, taxiways and aprons, other visual guidance and control aids on taxiways and aprons, the types of apron docking system(s) and availability of standby power for lighting (if any).
- g. location and radio frequency for VOR aerodrome check points;
- h. location and designation of any standard taxi routes;
- i. geographical co-ordinates of each threshold;
- j. geographical co-ordinates of any appropriate taxiway center line points;
- k. geographical co-ordinates of each aircraft stand;
- l. geographical co-ordinates and top elevation of significant obstacles in the approach and take off climb areas, in the circling area and in the vicinity of the aerodrome;
- m. Pavement surface type and bearing strength using the Aircraft Classification Number – Pavement Classification Number (ACN-PCN) method;
- n. Locations for any pre-flight altimeter check positions established on the apron and their elevations;
- o. Declared distances - declared distances for take off run available, takeoff distance available, accelerate-stop distance available and landing distance available for each usable runway direction;
- p. Disabled aircraft removal plan – all contact information for the aerodrome co-coordinator for removal of a disabled aircraft and information on the capability to remove a disabled aircraft expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove;
- q. Rescue and fire fighting – the level of protection provided, expressed in terms of ICAO Annex 14 category of the rescue and fire fighting service.

## **Section 4 Aerodrome Operating Procedures**

#### **4.1 Aerodrome Reporting**

Particulars of procedures for reporting any changes to information set out in the AIP and procedures for requesting the issue of NOTAM, including details of the following:

- a. the arrangements for reporting any changes that may affect aircraft operations to AIS and local air traffic services and DGCA and recording the reporting of changes during and outside the normal hours of aerodrome operation;
- b. the name and responsibilities of the officer(s) responsible for reporting the changes and details including, the telephone number(s), for contacting him or her during and after working hours; and
- c. the contact details for the persons and organizations to which changes are to be reported.

#### **4.2 Access To The Aerodrome Movement Area**

Particulars of the procedures that have been developed and are to be followed, in coordination with other responsible agencies, to control access and prevent unauthorized entry of persons, vehicles, equipment or animals, or other things that may endanger aircraft safety, onto the movement area, including details of the following:

- a. the roles and responsibilities of the aerodrome operator, aircraft operators, security organizations the DGCA and other government departments, as appropriate; and
- b. the names and roles of the persons who are responsible for controlling access to the movement area and the telephone numbers for contacting them during and after working hours.

#### **4.3 Aerodrome Emergency Plan**

Particulars of the aerodrome emergency plan, including at least:

- a. plans for dealing with emergencies occurring at the aerodrome or in its vicinity, including malfunction of aircraft in flight, structural fires, natural disasters, sabotage, including bomb threats (aircraft or structure), unlawful seizure of aircraft and incidents on the airport covering during and after emergency considerations;
- b. details of tests for aerodrome facilities and equipment to be used in emergencies, and the arrangements for keeping them in readiness including the frequency of such tests;
- c. the arrangements for periodic review and testing of the aerodrome emergency plan;

- d. the activation, control and coordination of the emergency service organizations, agencies and persons of authority, both on- and off- airport, during an emergency including a list of contact details for each entity;
- e. the establishment and composition of an aerodrome emergency committee, with functional responsibility to at least organize training and other preparations for dealing with emergencies, including;
  - 1) contact details for the emergency service organizations represented on the committee;
  - 2) a description of the role of each emergency service organisation involved in the plan;
  - 3) the operational response to an emergency, including arrangements for aerodrome access and assembly areas;
  - 4) the response to a local stand-by call out;
  - 5) the response to a full emergency call out;
  - 6) the arrangements to return the aerodrome to operational status after an emergency; and
  - 7) the appointment of an on-scene commander for the overall emergency operation.

#### **4.4 Aerodrome Rescue and Fire Fighting Service**

Particulars of the facilities, equipment, personnel and procedures for meeting the rescue and fire fighting requirements, including the names and roles of the persons responsible for dealing with the rescue and fire fighting services at the aerodrome.

#### **4.5 Inspection Of Movement Area And Obstacle Limitation Surface**

Particulars of the procedures for the safety inspection of the movement area and obstacle limitation surface, including at least :

- a. the arrangements for carrying out routine and special movement area inspections during and after working hours;
- b. the arrangements for conducting runway friction testing and water depth measurements on runways and taxiways;
- c. details of the intervals at which the inspections are carried out and the times of the inspections;
- d. the arrangements for keeping and inspection logbook and the place where the logbook is kept;
- e. details of the inspection checklists;

- f. the arrangements for communicating with air traffic control during inspections;
- g. the arrangements for reporting the results of inspections and tests and for taking prompt follow-up action to ensure correction of unsafe conditions; and
- h. the names and roles of the persons who are responsible for carrying out the inspections and the telephone numbers for contacting them during and after working hours.

#### **4.6 Visual Aids And Electrical Systems**

Particulars of the procedures for the inspection and maintenance of the aerodrome lighting (including obstacle lighting), signs, markers and the aerodrome electrical systems (including supply of stand-by power, if any, including details of the following:

- a. the arrangements for carrying out inspections during and outside the normal aerodrome operating hours, and the checklists for all inspections;
- b. the arrangements for recording the results of inspections and tests and for taking follow-up action to correct deficiencies;
- c. the arrangements for the performance of routine and emergency maintenance;
- d. as applicable, the arrangements for stand-by power and particulars of any other method of dealing with partial or total system failure;
- e. the names and roles of the persons who are responsible for the inspection and maintenance of the aerodrome lighting systems and the telephone numbers for contacting them during and after working hours.

#### **4.7 Maintenance Of The Movement Area**

Particulars of the procedures, facilities and equipment used for maintenance of the movement area, including at least:

- a. Arrangements for maintaining paved areas;
- b. Arrangements for maintaining unpaved areas;
- c. Arrangements for maintaining the runway strip and taxiway strips; and
- d. Arrangements for the maintenance of the aerodrome drainage system.

#### **4.8 Aerodrome Work Safety Arrangements**

Particulars of the procedures for planning and safely conducting aerodrome works (including works that may have to be carried out at short notice), on or in the vicinity of the movement area and which may penetrate an obstacle limitation surface, including details of the following:

- a. the preparation of a plan identifying areas of the aerodrome affected during each stage of works and steps taken to ensure safety standards are met;
- b. the arrangements for communicating with air traffic control, and aircraft if necessary, during the conduct of works;
- c. the names, telephone numbers and roles of the persons and organizations responsible for planning and carrying out works, and the arrangements for contacting those persons and organizations at all times;
- d. the arrangements for notifying aircraft operators and other aerodrome users about work plans and the telephone numbers for contacting those operators and users during and after working hours; and
- e. the distribution lists for work plans;

#### **4.9 Apron Operational Management**

Particulars of the procedures for apron management, including aircraft parking control, if established, including details of the following:

- a. the arrangements between air traffic control and apron management;
- b. the arrangements for allocating and advising operators about aircraft parking positions;
- c. the arrangements for initiating engine start and ensuring clearances for aircraft push-back;
- d. an inventory and description of the activation and deactivation of any visual docking guidance system used at the aerodrome;
- e. the marshalling service;
- f. the leader (van) service or follow-me service; and
- g. the names, telephone numbers and roles of the persons responsible for planning and implementing aircraft parking control.

#### **4.10 Apron Safety Management**

Particulars of procedures adopted to ensure apron safety, including:

- a. Protection from jet blast;
- b. Enforcement of safety precautions during aircraft refueling operations;
- c. Sweeping of aprons;
- d. Cleaning of aprons;
- e. Arrangements for reporting incidents and accidents on aprons; and

- f. Arrangements for auditing the safety compliance of all personnel working on aprons.

#### **4.11          Airside Vehicle Control**

Particulars of procedures for the control of surface vehicles operating airside and on or in the vicinity of the movement area, including :

- a. The applicable traffic rules (including speed limits) and the means of enforcement of the rules;
- b. The method of instructing and testing drivers in relation to the applicable traffic rules;
- c. The method of issuing vehicle and driver permits for airside operations;
- d. If applicable, the means of enforcing compliance with the rules; and
- e. The names, telephone numbers and roles of the persons responsible for airside vehicle control.

#### **4.12          Wildlife Hazard Management**

Particulars of the procedures to deal with danger to aircraft operations caused by the presence of birds or animals on or near the aerodrome, including details of the following:

- a. the arrangements for assessing any bird or animal hazard;
- b. implementing arrangements for the control or removal of any bird or animal hazard; and
- c. the names and roles of the persons responsible for dealing with bird or animal hazards, and the telephone numbers for contacting them during and after working hours.

#### **4.13          Obstacle Control**

Particulars of procedures associated with the control of objects on or in the vicinity of the aerodrome that have the potential to become, or are, obstacles with a consequent impact on the safety or efficiency of aerodrome operations, including at least:

- a. Monitoring the obstacle limitation surfaces and the Type A chart take-off surface for obstacles;
- b. Monitoring building developments (in relation to the height of buildings and other structures) within the horizontal limits of the obstacle limitation surfaces;



- c. Controlling obstacles or potential obstacles within the authority of the aerodrome operator;
- d. Controlling new developments in the vicinity of the aerodrome with, as applicable, arrangements between the operator, DGCA, local planning authorities and other relevant organizations in relation to the approval of building developments that may infringe the obstacle limitation surfaces;
- e. Notifying the DGCA of the nature and location of obstacles and any subsequent addition or removal of obstacles for action as necessary, including amendment of AIS publication; and
- f. If the aerodrome has instrument approach procedures — the procedures for monitoring for new objects or building developments in any other areas nominated by the instrument procedure designers; and
- g. The names, telephone numbers and roles of the persons responsible for planning, implementing and monitoring obstacle control.

#### **4.14 Removal of Disabled Aircraft**

Particulars of the procedures for removing an aircraft that is disabled on or near the movement area, including details of the following:

- a. The roles of the aerodrome operator and the holder of the aircraft's certificate of registration;
- b. Arrangements for notifying the holder of the certificate of registration;
- c. Arrangements for liaising with air traffic control the organisation responsible for aircraft accident investigation;
- d. Arrangements for obtaining equipment and persons to remove the aircraft;
- e. The names and roles of the persons who are responsible for arranging for the removal of an aircraft which is disabled, and the telephone numbers for contacting them during and after working hours.

#### **4.15 Handling Of Hazardous Materials**

Particulars of the procedures for the safe handling of hazardous materials (but not items generally classified as dangerous goods for shipment by air) on the aerodrome, including details of the following:

- a. The names, telephone numbers and roles of the persons who are to receive and handle hazardous materials;
- b. Arrangements for special areas on the aerodrome to be set up for the storage of flammable liquids (including aviation fuels) and any other hazardous materials;
- c. Methods to be followed for the delivery, storage, dispensing and handling of these materials;

Note 1 Hazardous materials include explosives, flammable liquids and solids, corrosive liquids, compressed gases, and magnetised or radioactive materials.

Note 2 The arrangements to deal with an accidental spillage of hazardous materials are to be set out in the aerodrome emergency plan.

#### **4.16 Low Visibility Operations**

Particulars of the procedures for the management of ground activities at an aerodrome where approved low visibility operations are conducted, including details of the following:

- a. The arrangements for measuring visibility along a runway and reporting the information to air traffic control, if required;
- b. Arrangements for controlling and minimising vehicular traffic within the movement area during periods of low visibility operations;
- c. Arrangements for runway inspections during periods of low visibility operations; and
- d. The names and roles of the persons who are responsible for low visibility operations, and the telephone numbers for contacting them during and after work hours.

#### **4.17 Protection Of Radar And Navigation Aid Sites**

Particulars of the procedures for the protection of radar and navigational aids located on the aerodrome to ensure that their performance will not be degraded, including details of the following:

- a. Arrangements for the control of activities near radar and Navigational Aid Installations;
- b. Arrangements, made in consultation with the provider of the navigational aid installation, for the supply and installation of signs warning of hazardous microwave radiation; and
- c. Arrangements for ground maintenance near these installations.

### **Section 5 Particulars Of Aerodrome Administration And The Aerodrome Safety Management System**

#### **5.1 Aerodrome Administration**

Particulars of procedures for aerodrome administration including the following:

- c. The organizational structure with an organizational chart showing the names of occupants of key positions;
- d. The management positions responsible for the operation and maintenance of the aerodrome, including financial responsibility;

- e. Contact details for the main persons responsible for aerodrome operations and safety functions; and
- f. Contact details of the person who is the aerodrome manual controller.

## **5.2 Aerodrome Committees**

Particulars of committees established to manage or assist with the aerodrome operations covered by this manual, including for each committee at least:

- a. Name of the committee and identification of and contact details, as applicable, for
  - 1) Chairman;
  - 2) Other senior executive members.
- b. Terms of reference for committees, or similar instructions;
- c. Meeting schedules.

## **5.3 Additional Mandatory Requirements**

The aerodrome manual is to include details of, or references to, all conditions, exemptions, directions, instructions, audit reports and other communications from DGCA regarding safety matters associated with the establishment, management, operation or maintenance of the aerodrome.

## **5.4 Aerodrome Safety System**

Particulars of the aerodrome safety management system established to ensure compliance with all safety requirements and to achieve continuous improvement in safety performance, including matters to address:

- a. Safety policy, safety management procedures and management accountability regarding operational and maintenance processes;
- b. The structure or organisation of the safety management system (sms) including staffing and assignment of individual and group roles and responsibilities for safety issues, including action requirements for critical safety issues and provision of continuing safety monitoring;
- c. Development of SMS strategy and planning and provision of a method (including identification of hazards and risk assessments) to control risks to as low a level as practicable while maintaining compliance with standards published in the manual of standards or other applicable standards, regulations, rules or orders;

- d. Implementation of sms including the use facilities, methods and procedures for the effective communication of safety messages and enforcement of safety requirements;
- e. Measures for safety promotion and accident prevention ;
- f. Investigation, analysis and reporting on accidents, incidents, complaints, defects, faults, discrepancies and failures;
- g. Provision of documentation for all safety related facilities, ensuring that data is retained in a complete and current state, as well as operational and maintenance records including information on design and construction of aircraft pavements and aeronautical lighting in a manner to enable easy and rapid retrieval of records including charts and plans;
- h. Staff training and competency on safety related activities;
- i. Incorporating and enforcing safety requirements in contracts for work at the aerodrome; and
- j. Evaluation and monitoring the performance of the SMS including internal safety audits and reviews for quality control of safety.

## APPENDIX 2

## Form Of Application For An Aerodrome Certificate

Application for an Aerodrome Certificate

### 1. Particulars of the applicant

Full Name:.....

Address: .....

..... Postcode: .....

Position: .....

Phone: ..... Fax:..... Email .....

### 2. Particulars of aerodrome site

Aerodrome Name: .....

Real Property Description: .....

.....

Geographical Coordinates of the ARP: .....

Bearing and Distance from Nearest Town or Populous Area:

.....

.....

### 3. Is the applicant the owner of the aerodrome site?

☐ Yes or ☐ No, If No, provide:

a) Details of rights held in relation to the site: and

b) Name and address of the owner of the site and written evidence to show that permission has been obtained for the site to be used by the applicant as an aerodrome.

### 4. Indicate the largest type of aircraft expected to use the aerodrome

.....

.....

### 5. Is the aerodrome to be used for air transport operations?

☐ Yes or ☐ No

### 6. Details to be shown on the aerodrome certificate

Aerodrome Name: .....

Aerodrome Operator: .....

[On behalf of the Aerodrome Operator shown above \*], I hereby apply for a certificate to operate the aerodrome.

\* Delete if not applicable.

Signed: .....

My authority to act on behalf of the applicant is:

.....  
.....

Name of person

making the declaration: .....

Date: ...../ ...../ .....

Information:

1. A copy of the Aerodrome Manual, prepared in accordance with the regulations and commensurate with the aircraft activities expected at the aerodrome, may required as part of the application. CASR 139.23 refers
2. The application should be submitted to the DGCA Office.
3. Documentary evidence in support of all matters in this application may be requested.

**1. Aerodrome Diagram**

The diagram of the aerodrome must show the following:

- a. The layout of runways, their designations (runway numbers) and length in metres;
- b. The layout of taxiways and aprons;
- c. The location of the aerodrome reference point;
- d. The location of all wind direction indicators;
- e. The elevation of the aerodrome at the highest point of the landing surface; and
- f. The magnetic bearing and distance to the nearest population centre, and what that centre is.

**2. Aerodrome Information**

The information about the aerodrome must include:

a. Aerodrome Administration

the following information about the aerodrome and its administration:

- 1) the name of the aerodrome;
- 2) the name of the aerodrome operator and the address and telephone numbers at which the aerodrome operator may be contacted at all times;
- 3) the latitude and longitude for the location of the aerodrome reference point;
- 4) whether the aerodrome is a public or private aerodrome;
- 5) if charges for use of the aerodrome are payable;
- 6) the name and contact details for the persons who are to be the reporting officers for the aerodrome.

b. Runways

the following information for each runway at the aerodrome:

- 1) The runway reference code number for the approach and take-off areas that have been surveyed;
- 2) Runway width and slope;
- 3) Runway strip width (grade and overall);
- 4) Declared distances and supplementary take-off distances;
- 5) Pavement strength rating.

c. Aerodrome Lighting

for each runway at the aerodrome that may be used at night — the following information:

- 1) Whether the runway edge lights are low, medium or high intensity lights;

- 2) Whether approach lighting is provided;
- 3) Whether t-vaxis or papi lighting systems are provided;
- 4) Whether there is an aerodrome beacon;
- 5) Whether there is stand-by power or portable lighting;
- 6) Information about any other lighting provided
- d. The following information about ground services available to visiting pilots:
  - 1) the types of aviation fuel available and contact details for fuel suppliers;
  - 2) contact details for local weather information;
  - 3) details of the universal communication system
- e. Special Procedures  
information about any special procedures that pilots need to observe or follow
- f. Notices  
The following local safety information:
  - 1) The presence of obstacles or other hazards (including animals or birds);
  - 2) Restrictions on the use of taxiways or aprons;
  - 3) Other activities at the aerodrome (for example, sport aviation activities).

### **3. Procedures in Aerodrome Manual minimal consist of:**

#### **a. Aerodrome Reporting**

Particulars of procedures for reporting any changes to information set out in the AIP and procedures for requesting the issue of NOTAM, including details of the following:

- 1. the arrangements for reporting any changes that may affect aircraft operations to AIS and local air traffic services and DGCA and recording the reporting of changes during and outside the normal hours of aerodrome operation;
- 2. the name and responsibilities of the officer(s) responsible for reporting the changes and details including, the telephone number(s), for contacting him or her during and after working hours; and
- 3. the contact details for the persons and organizations to which changes are to be reported.

#### **b. Inspection Of Movement Area And Obstacle Limitation Surface**

Particulars of the procedures for the safety inspection of the movement area and obstacle limitation surface, including at least:

- a. the arrangements for carrying out routine and special movement area inspections during and after working hours;



- b. the arrangements for conducting runway friction testing and water depth measurements on runways and taxiways;
- c. details of the intervals at which the inspections are carried out and the times of the inspections;
- d. the arrangements for keeping an inspection logbook and the place where the logbook is kept;
- e. details of the inspection checklists;
- f. the arrangements for communicating with air traffic control during inspections;
- g. the arrangements for reporting the results of inspections and tests and for taking prompt follow-up action to ensure correction of unsafe conditions; and
- h. the names and roles of the persons who are responsible for carrying out the inspections and the telephone numbers for contacting them during and after working hours.

**c. Maintenance Of The Movement Area**

Particulars of the procedures, facilities and equipment used for maintenance of the movement area, including at least:

- a. Arrangements for maintaining paved areas;
- b. Arrangements for maintaining unpaved areas;
- c. Arrangements for maintaining the runway strip and taxiway strips; and
- d. Arrangements for the maintenance of the aerodrome drainage system.

### Appendix 3b Information for Heliport/Helideck

## I. DATA HELIPORT/HELIDECK

1. Name : .....
2. Owner : .....
3. Location : .....
4. Responsible Person : .....
5. Coordinat : .....
6. Elevation : .....
7. Operated Helicopter : .....
8. Usage : .....

**II. STATUS** : .....

### III. ELEVATED HELIPORT FACILITIES

- |  |   |       |
|--|---|-------|
| 1. Final Approach and Take Off Area (FATO) dimension | : | ..... |
| 2. Touchdown Zone                                    | : | ..... |
| 3. Surface construction                              | : | ..... |
| 4. Strength  | : | ..... |
| 5. Wind Sock   | : | ..... |
| 6. Light Perimeter                                   | : | ..... |
| 7. Flood Light                                       | : | ..... |
| 8. Obstruction Light                                 | : | ..... |
| 9. Location Obstacle                                 | : | ..... |
| 10.Communication                                     | : | ..... |
| 11.Fire Fighting Equipment                           | : | ..... |
| 12.Rescue Equipment                                  | : | ..... |

#### IV. NOTES

1. ....  
.....  
.....  
.....
2. ....  
.....  
.....

3.c.1 Technical feasibility consist of:

- 1) Topography
- 2) Height of wave
- 3) Depth of water
- 4) Speed of water flow
- 5) Tidal

3.c.2 Operational feasibility :

1. Type of seaplane
2. Weather impact (wind)
3. Obstacle
4. Access channel
5. Air space usage
6. Water space usage
7. Floating things

3.c.3 Facilities of aviation safety

3.c.4 Personnel

3.c.5 Register of Seaplane Bases, include information:

1. Name of Seaplane Bases
2. Detail Location of Seaplane bases
3. Name and address of Seaplane Bases Operator

## **APPENDIX 4**

## **Matters To Be Dealt With In Safety Inspections**

### **1. Details of Aerodrome**

Check that the following details relating to the aerodrome, published in AIP or given to air transport operators, are correct:

- a. details of the location of the aerodrome;
- b. the name and address of the aerodrome operator;
- c. details of the movement area;
- d. details of runway distances available;
- e. details of the aerodrome lighting;
- f. details of ground services;
- g. notice of special conditions and procedures, if any.

### **2. Aerodrome Operating Procedures**

Check aerodrome operating procedures to ensure that the following matters are dealt with:

- a. Recording of aerodrome inspections;
- b. Recording of notices given to the notam office and ais or to air transport operators;
- c. Recording of aerodrome works.

### **3. Reporting Officer**

Check that each person appointed as a reporting officer is competent to carry out the reporting officer's functions.

### **4. Details relating to movement area etc**

Check the following:

- a. dimensions and surface conditions of runways, taxiways and aprons;
- b. aerodrome lighting, including back-up lighting and obstacle lighting;
- c. wind direction indicators and their illumination;
- d. aerodrome markings and signs;
- e. obstacle limitation surfaces applicable to the aerodrome;

- f. two-way radios (whether hand-held or installed in vehicles) used by the aerodrome operator on the movement area;
- g. equipment used for dispersing birds;
- h. aerodrome fencing.

## **APPENDIX 5**

### **Requirements For Persons To Conduct Aerodrome Safety Inspections**

1. A person may apply to DGCA for approval to conduct aerodrome safety inspections.
2. DGCA may approve the person if the person:
  - a. Has:
    - 1) A recognized degree, diploma or certificate in civil engineering, surveying or a related field and a sound knowledge of the parts of these Regulations and the standards, practices and procedures that are applicable to the operation and maintenance of aerodromes; or
    - 2) Other qualifications, knowledge and experience that DGCA considers suitable for conducting an aerodrome safety inspection; and
  - b. Would, if the approval is given, be able to perform properly the aerodrome safety inspection function.
  - c. Indonesia legal entity which approved from DGCA with requirements:
    - 1) Founding act (establishment deed)
    - 2) Organization structure
    - 3) NPWP
    - 4) List of expert including curriculum vitae
    - 5) Manual inspection
    - 6) Supporting facilities of inspection
3. Unless sooner cancelled, any approval issued for inspection team and Indonesia legal entity remains in force until the end of 5 years after it is given. Approved Indonesia legal entity will be evaluated every year.
4. An approval is not in force during any period in which it is suspended, but the period of suspension counts as part of the 5 year approval period.
5. DGCA may suspend or cancel an approval of a person by written notice given to the person, if the person has not properly carried out, or is no longer properly carrying out, the aerodrome safety inspection function