

Lao People's Democratic Republic Ministry of Public Works and Transport Department of Civil Aviation (DCA)

Manual Aerodrome Certification Procedures

First Edition

2010



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Ministry of Public Works and Transport Department of Civil Aviation

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Approval

Amendment to Manual Aerodrome Certification Procedures (MACP)

- Pursuant to the Ministerial Decision of Ministry of Public Works and Transport No. No. 15702, dated 01 Sep, 2014 on Duties and Responsibilities of the Department of Civil Aviation.
- Pursuant to the Manual Aerodrome Certification Procedures, First Edition, dated 29 Jan 2010.

The Department of Civil Aviation hereby approves the amendment No. 3 as follows:

Article 1: Amendment to Manual Aerodrome Certification Procedures, Date 22/04/2015 as follow;

- Chapter 3 Expression of Interest, Sub-clause 3.1.2, page 16
- Chapter 7 Aeronautical Study, Article 7.2 When an aeronautical study is appropriate.
- Addition of Appendix 1, Application form for aerodrome certification/registration, page (Ap1-1) – (Ap1-3)
- Addition of Appendix 2, Aerodrome certificate, page (Ap2-1) (Ap2-2)
- Addition of Appendix 3, Exemption form, page (Ap3-1) (Ap3-2)
- Addition of Appendix 4, Visual Aids Standard Checklist, page (Ap4) CH 2-1(MACP) 3 of 3

Article 2: Relevant Organizations shall follow the instructions and implement the procedures set out in this amended Manual Aerodrome Certification Procedures accordingly.

Article 3: The amendment to Manual Aerodrome Certification Procedures shall become effective upon the date of signature of the Director General.



Preamble

This is a DCA safety program document. It contains process determined to be necessary for supporting operational safety at aerodromes in Laos.

This manual is issued under the authority of the Director General of DCA.

The Aerodrome Division is intended to refer throughout this manual to the DCA officer responsible for the certification, registration and on-going safety oversight of aerodrome activity.

This manual consists of 7 Chapters and shall come into force after date of signing.

Comments about the content are welcome from staff members of DCA or members of the aviation industry. Any comments or requests for clarification should be directed to:

Department of Civil Aviation of Laos (DCA)

Wattay Intn'l Airport, PO Box: 119 Tel: 856-21 512163, Fax: 856-21512164, Vientiane Capital Lao PDR

Adopted by Director General Department of Civil Aviation of Laos

29 2010 Date JAN:

Yakua LOPANGKAO

Remark: DGCA is Granted Power to sign these requirements by the Minister under the Ministerial Decision N. 16948/PWT dated 16 Dec, 2009

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Amendments

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Chapter-1. Overview

1.1 Introduction

This manual describes the process, including regulations and procedures, used by staff of the DCA to deal with queries about, and applications for, the issue, transfer or surrender of aerodrome certificates, the registration of aerodromes and the approval of persons to conduct annual aerodrome safety inspections. It is intended to ensure DCA staff can rapidly reference the regulations that govern aerodromes, to set out the responsibilities of DCA staff, the particular applicable standards, and the procedures DCA staff must follow when processing applications associated with aerodrome safety regulation.

1.2 Authority

Under the Ministerial Decision number 8682/PWT dated 30 June 2009 authorizes the Director General to issue rules of procedure and practice, and this manual is issued under the authority of the Director General for Civil Aviation. DCA staff shall comply with the instructions and procedures contained in it.

1.3 Amendment and revisions

Responsibility for revision and amendment of the manual rests with the Director General. All comments concerning the manual and its contents should be directed initially to the Head of the Aerodrome division.

1.4 Purpose of the manual

The manual provides guidance to DCA staff on the procedures to be followed for the approval of:

- aerodrome certificates;
- aerodrome registration;
- persons, not being DCA staff, for the conduct of aerodrome safety inspections (subject to any future decision to implement such a scheme);and

➢ requirements for performing an aeronautical study as required under the provisions of Governing Aerodrome

Additionally, guidance is provided for answering enquiries related to the requirements of these actions. This manual:

- defines the applicable regulations; and
- > sets out the:
 - responsibilities of DCA staff; and
 - procedures DCA staff must follow when processing an application.

Adherence to procedures will provide an assurance that:

applications for an aerodrome certificate, registration or an approved person approval are dealt with in an effective, efficient and consistent manner nationally; and aerodrome certificates, registration or other approvals are issued in a common and legal format and any aeronautical studies are performed within a structured format.

1.5 Scope of the manual

This manual is part of the DCA document set. It includes processes, flowcharts, letters, forms and support documentation to assist DCA officers when assessing entry control applications for aerodrome owners or for persons seeking approval to conduct aerodrome safety inspections.

1.6 Target audience

The manual is designed to be useful to aviation regulatory professionals who have relevant qualifications, experience, training and knowledge relating to aviation safety oversight of aerodromes and assumes that basic knowledge of the topics addressed is well understood.

For more detailed information the relevant administrative orders, standards and advisory circulars should be consulted.

This procedure manual is provided for the guidance of:

- DCA staff to assist in handling enquiries and applications related to:
 - aerodrome certification;
 - aerodrome registration;
 - approved persons for the conduct of aerodrome safety inspections; or
- DCA inspectors for the assessment of applications for:
 - certification of an aerodrome; and
 - registration of an aerodrome;
- DCA inspectors for the assessment of applications for approved persons to conduct aerodrome safety inspections at registered and certain other aerodromes;
- aerodrome operators seeking to apply for aerodrome certification or registration; and
- aerodrome consultants seeking to apply for approval to conduct aerodrome safety inspections at registered or certain other aerodromes; and
- DCA staff, service providers or consultants for an aeronautical study of aerodromerelated matters.

1.7 Definitions, Acronyms and Abbreviations

1.7.1 Definitions

The following definitions apply to processes described in this manual.

| Advisory Circular (AC) | Guidance material on the means of achieving the minimum compliance with the AO and MOS standards |
|-----------------------------|---|
| AEP | Aerodrome Emergency Plan |
| Aerodrome | A defined area of 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. |
| AI | Aerodrome Inspector |
| AAI | Assigned Aerodrome Inspector |
| ASI | Aerodrome Safety Inspection |
| AIS | Aerodrome Information Service |
| Annex 14 Aerodromes | Annex 14 Volume 1 to the Convention on International Civil Aviation Organization (ICAO) |
| ELS | Enforcement and Legal Service |
| Manual of Standards (MOS) | |
| NOF | NOTAM Office |
| NOTAM - Notice to Airman | A notice issued by the NOTAM Office and containing information or instruction concerning |
| | the establishment, condition or change in any aeronautical facility, service, procedure or hazard. |
| RCA | Request for corrective action. |
| RGA | Regulation Governing Aerodrome |

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1.8 Organization chart

The organization of that section of DCA responsible for aerodrome safety regulation and the associated reporting lines is shown in the chart below.



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Chapter-2. Entry Control

2.1 Introduction to entry control procedures

Entry control refers to the process by which a person or organization is granted a permission by the regulatory authority to enter the aviation industry and conduct business. It is the primary means for the regulatory authority to be assured the person or organization will be capable of operating competently and safely.

The operational safety requirement for entry control of aerodrome operators, in the broadest terms, is to ensure they are able to demonstrate that:

- the facilities being provided meet the specified standards as per MOS Aerodromes;
- aerodrome operational staff are trained, competent and sufficient in number to carry out the functions specified in MOS; and
- appropriate documented aeronautical data is provided and operational procedures are in place at certified aerodromes.

Prior to an approval of any persons to undertake a safety regulatory task such as an annual safety inspection of an aerodrome, DCA must be satisfied that the qualifications, experience levels and knowledge of that person meet the requirements nominated in Governing Aerodrome and that they are properly able to carry out aerodrome safety inspections.

2.2 Regulatory basis

2.2.1 Certificate requirement controls

- RGA-7 Requires an aerodrome operator to hold a certificate if an aerodrome is used for international operations, or is used for domestic operations by aircraft with a maximum take-off weight 5700 kg or more.
- RGA-8 (2) Any person may apply for a certificate to operate a specific aerodrome, such application to be in the approved form.

2.2.2 Certificate issue controls

RGA-9 Defines the basic requirements, and identifies DCA responsibilities, for granting a certificate. DCA will assess:

- compliance with standards;
- that the operating procedures have satisfactory provision for safety;

- that an acceptable aerodrome manual has been provided;
- if the operator is likely to be able to properly operate and maintain the aerodrome; and
- that an acceptable safety management system is implemented.
- RGA-10 Authorizes DCA to refuse to grant a certificate and requires written notification to the applicant of the reasons for such refusal.
- RGA-11 Authorizes DCA to endorse a condition or conditions on an aerodrome certificate in the interests of safety.
- RGA-12 Specifies the validity period for an aerodrome certificate.
- RGA 17 (2) Permits DCA to grant a temporary aerodrome certificate for a period not exceeding 30 days.

2.2.3 Certificate surrender controls

RGA-14 Provides for a certificate holder to surrender a certificate and for DCA to cancel a surrendered certificate.

2.2.4 Certificate transfer control

RGA-16 An aerodrome certificate is not transferable.

2.2.5 Cancellation or suspension controls

- RGA-13(1) Establishes the condition(s) when DCA may cancel or suspend an aerodrome certificate.
- RGA-13(2) Requires a show cause process before DCA cancels an aerodrome certificate.
- RGA-15 A person whose certificate is cancelled must return the certificate to DCA.

2.2.6 Registration requirement controls

- RGA-56(1) Requires an aerodrome to be registered by DCA if it is used for domestic operations by aircraft with with a maximum take-off weight 5700 kg or more
- RGA-57(1) Application for registration to be made to DCA.

- RGA 57(2) An application is to be submitted in the approved form and accompanied by required information about the aerodrome, a safety inspection (provided by a DCA Inspector or an approved or acceptable person) confirming that the relevant aerodrome standards have been met, and identifying the reporting officers.
- RGA 58(a) Operator provides information about a registered aerodrome.
- RGA-58(b) DCA to register aerodromes, inform owner and ensure data published in the Aeronautical Information Publication (AIP).
- RGA-59 Authorizes DCA to refuse to register an aerodrome and requires written notification to the applicant of the reasons for such refusal.
- RGA-60(1) Authorizes DCA to establish an aerodrome register and to maintain and disseminate information about registered aerodromes..
- RGA -61 Specifies the duration of aerodrome registration.
- RGA-65 Specifies that a registered aerodrome will have reporting officers.

2.2.7 Cancellation or suspension controls

RGA -62 Establishes the condition when DCA may cancel or suspend an aerodrome registration.

2.2.8 Surrender of registration controls

- RGA- 63 Authorizes an operator to request that DCA cancel a registration and that DCA shall do so.
- RGA-69 Specifies the duration of an approval of a person.

2.2.9 Persons to conduct safety inspections

RGA-68 Establishes that a person may apply for approval to conduct aerodrome safety inspections of registered aerodromes and specifies qualification, knowledge and experience requirements.

2.2.10 Cancellation or suspension controls

RGA-70 DCA may suspend or cancel an approval of a person by written notice given to the operator, if the person has not properly carried out or is no longer properly carrying out the aerodrome safety inspection function.

2.3 References

2.3.1 Reference documentation

Civil Aviation Law, First Edition, May 2005 Regulation Governing Aerodromes, 2nd Edition 20102009 Manual of Standards for Aerodromes (MOS), 1st Issue 2009 ICAO Annex 14, Aerodromes, Volume 1, 5th Edition Amend 10b. ICAO Document 9774, Manual on Certification of Aerodromes This page intentionally blank

Chapter-3. Expression of Interest

3.1 Aerodrome certification

3.1.1 Purpose

To ensure expressions of interest from industry about aerodrome certification are dealt with effectively and efficiently by DCA staff.

3.1.2 Controls

- RGA-7 Requires an aerodrome operator to hold a certificate if an aerodrome is used for international operations, or is used for domestic operations by aircraft with a maximum take-off weight 5700kg or more.
- RGA-8(2) Any person may apply for a certificate to operate a specific aerodrome, such application to be in the approved form (as attached in Appendix 1)
- RGA-9 Defines the basic requirements, and identifies DCA responsibilities, for granting a certificate (Aerodrome Certificate is attached in Appendix 2). DCA will assess:
 - compliance with standards;
 - that the operating procedures have satisfactory provision for safety;
 - that an acceptable aerodrome manual has been provided;
 - if the operator is likely to be able to properly operate and maintain the aerodrome; and
 - that an acceptable safety management system is implemented.
 - construction planning, Comprehensive airport assessment impact environmental including and by organizations concerned approved documents related to environmental and social consideration, as well as environmental guidance and environmental management plan consideration have been prepared and submitted to DCA.
- RGA-10 Authorizes DCA to refuse to grant a certificate and requires written notification to the applicant of the reasons for such refusal.
- RGA-11 Authorizes DCA to endorse a condition or conditions on an aerodrome certificate in the interests of safety.
- RGA-12 Specifies the validity period for an aerodrome certificate.

3.1.3 Handling enquires

Any potential applicant should be advised that they must:

- obtain a copy of
 - Regulation, governing Aerodrome, 2nd Edition 2010;
 - Manual of Standards for Aerodromes1st Issue 2009; and
- prepare and submit an aerodrome manual meeting the requirements of RGA;
- > apply on the approved form Application for an Aerodrome Certificate; and
- pay the quotation fee once an estimate is provided by the DCA upon assessment of the application.
 - **Note:** The certification process will only proceed upon payment of the fee. The initial application and aerodrome manuals should be passed to the assigned aerodrome inspector for logging and coordination of the application process.

All requests for information about certification should be forwarded to the assigned Al who will coordinate and track progression of the expression of interest.

3.2 Aerodrome registration

3.2.1 Purpose

To ensure expressions of interest from industry about aerodrome registration are dealt with effectively and efficiently by DCA staff.

3.2.2 Controls

- RGA-56 (1) Requires an aerodrome to be registered by DCA if it is used for domestic operations by aircraft with a maximum take-off weight 5700 kg or more
- RGA -56(1) Requires an aerodrome to be registered by DCA if an aerodrome is open to public use and has a published instrument approach procedure, unless the aerodrome has been certified by DCA.
- RGA 57(1) Application for registration to be made to DCA.
- RGA-57 (2) An application is to be submitted in the approved form and accompanied by required information about the aerodrome, a safety inspection (provided by an approved person), confirmation that the relevant aerodrome standards have been met, and names of the reporting officers.
- RGA-58(a) Who may provide information about a registered aerodrome.
- RGA-58(b) DCA to register aerodromes, inform owner and ensure data published in AIP.

- RGA-59 Authorizes DCA to refuse to register an aerodrome and requires written notification to the applicant of the reasons for such refusal.
- RGA-60(1) Authorizes DCA to establish, maintain and disseminate information about registered aerodromes.
- RGA-68 Establishes that a person may apply for approval to conduct aerodrome safety inspections of registered aerodromes and specifies qualification, knowledge and experience requirements.

3.2.3 Handling enquires

An aerodrome operator who seeks to register an aerodrome should be advised that:

- The relevant regulations can be found within RGA and Manual of Standards for Aerodromes
- All applications must be made on the approved form applying for Aerodrome Registration.
- New applications must be accompanied by an ASI report, undertaken by a DCA Aerodrome Inspector or a person qualified under RGA.
- > The ASI must address the particulars set out within RGA.
- A nominal quotation fee for completion of the work is provided after assessing the application. The application will only proceed after payment of the fee.

All requests for information about aerodrome registration should be forwarded to the assigned Al who will coordinate and track progression of the request.

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Chapter-4. Aerodrome certification

4.1 Issuing an Aerodrome Certificate

4.1.1 Flowchart – Approval Procedure for Aerodrome Certification



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4.2 Procedure for aerodrome certification.

4.2.1 Purpose

This section applies to those aerodromes operators who must obtain a certificate, and other applicants who may apply for a certificate, under the provisions of Regulation Governing Aerodromes for a specific aerodrome. This section is provided to ensure that aerodrome certificates are correctly and consistently issued using a common legal format nationally by describing the:

- process for assessing applications;
- process for issuing aerodrome certificates;
- legislation governing aerodrome certificates;
- staff responsibilities; and
- > forms and letters used.

4.2.2 Guidelines

In accordance with RGA 7an operator of an aerodrome that is used for international operations by any aircraft must have an aerodrome certificate for that aerodrome.

4.2.3 Key functions

The Head, Aerodrome Division is responsible for identifying those aerodromes that are required to be certified under the RGA.

The Head, Aerodrome Division shall be the initial contact point for an aerodrome operator seeking a certificate for their aerodrome. The workflow process shall be coordinated through the Head, Aerodrome Division who will track the progress of the application.

An application for certification of an aerodrome must be made on the approved form Application for an Aerodrome Certificate. DCA needs to put in place a formal system for issuing and maintaining forms used for aerodrome certification.

The Assigned Aerodrome Inspector (AAI) is responsible for assessing applications and advising applicants by way of standard letters, about the regulatory progress regarding certification. Sample letters are provided at Chapter 7.

4.2.4 Procedure

The Head, Aerodrome Division receives the application package and advises the AAI by minute along with the task number. The Head, Aerodrome Division also inputs or creates system reference details, computer based or manually.

Upon receiving the office minute and application package the AAI shall:

1. Open a file and reference the application and aerodrome manual.

- Determine the quotation fee based on the complexity of the application and advise the aerodrome operator. Input from Flight Safety should be sought for an operational assessment. Use the form EstimateforServicefor this purpose.
- 3. Proceed with the assessment upon payment of the application fee.
- 4. Confirm that the applicant is the owner of the land or has the permission of the landowner to operate the site as an aerodrome (see application).
- 5. Make an assessment of the aerodrome operator's documentation, ensuring that:
 - the application is in accordance with requirements and signed by an appropriate person;
 - > a current copy of the aerodrome manual has been received;
 - > the aerodrome manual is in the approved form per RGA; and
 - the aerodrome manual includes the details as per RGA.
- 6. Liaise with Flight Safety, ATS and ANS on operational issues and obtain agreement as necessary.
- 7. Review procedures set out within the aerodrome manual. RGA requires that for the manual to be acceptable, it must comply with RGA.
- 8. Perform an audit of the aerodrome, and determine if the:
 - aerodrome manual procedures make satisfactory provision for the safety of aircraft in accordance with RGA;
 - operator can properly operate and maintain the aerodrome in accordance with RGA;
 - aerodrome facilities and equipment are in accordance with the MOS as required by RGA(a); and
 - operator has implemented an acceptable safety management system for the aerodrome.
- 9. If the application is accepted, go to 10. If the application is **not** acceptable, advise all shortcomings to the applicant including any additional steps that need to be taken prior to the issue of a certificate and allocate another processing period (return to 2). Alternatively, refuse the application and prepare a draft letter, see *Refusal to Issue an Aerodrome Certificate* below.
- 10. If the application is accepted, the AAI shall forward the completed Aerodrome Certificate Issue Check sheet (see sample at Chapter 8) to the Head, Aerodrome Division confirming acceptance.
- 11. The Head, Aerodrome Division (as the delegate) is to review the aerodrome certificate issue checklist and if satisfied:
 - approve the application;
 - obtain the certification number and update the certification file;
 - produce and sign the Aerodrome Certificate; and

- return the signed Aerodrome Certificate and completed aerodrome certificate issue checklist to the AAI.
- 12 The AAI shall:
 - place a copy of the Aerodrome Certificate on the aerodrome file and in the DCA copy of the aerodrome manual;
 - place the completed Aerodrome Certificate Issue Check sheet on the aerodrome file;
 - advise the applicant by standard approval letter that the application has been successful. A sample letter is provided at Chapter 8. The original Aerodrome Certificate may be forwarded to the operator with the standard letter.
- 13. When the application is approved, the AAI will raise a NOTAM advising all particulars to be included within AIP. The AAI is to ensure a copy of the NOTAM is addressed to the aerodrome operator.
- 14. The AAI places the aerodrome on the audit schedule.
- 15. Advise the Head, Aerodrome Division of process completion, and brief affected DCA staff about the aerodrome certification.

Certificates are granted in perpetuity in accordance with RGA.

On occasion, conditions may be placed on an aerodrome certificate under MOS If conditions are being considered, the aerodrome inspector shall consult with the Head, Aerodrome Division. If a condition is required:

- > the reason for the condition shall be notified to the applicant in writing; and
- > the condition will be set out in a notice to the applicant.

4.2.5 Refusing an Application for Certification

If the AAI is not satisfied that the:

- > aerodrome meets the necessary standards; or
- > applicant can operate the aerodrome in a safe manner; or
- aerodrome manual and safety management system are acceptable, then the application shall be refused.

Written notification of the reason(s) of refusal to certify an aerodrome must be provided within 14 days, in accordance with MOS. A sample letter is provided at Chapter 8.

The decision to refuse an application is a reviewable decision. Unsuccessful applicants must be advised in writing of the reasons for the refusal to grant registration. All notifications advising of refusal to certify an aerodrome must be reviewed by Legal and Enforcement Service before being sent to the applicant. These sentences may not be appropriate for the legal requirements in the RP. Legal opinion should be sought.

Applicants who must take further steps to correct any deficiencies before an aerodrome can be certified are responsible for notifying the aerodrome inspector when the required work has been completed.

4.2.6 Aerodrome Certificate Issue Checksheet

The Aerodrome Inspector and the Aerodrome Division must complete the Aerodrome Certificate Issue Checksheet (Form 1001) to ensure that each step of the aerodrome certification procedure is completed. A sample of the form is shown in Chapter 8 of this manual.

Satisfactory completion and acceptance of each item is to be indicated by a tick mark in the relevant checkbox. The date on which the item was accepted must be indicated against each checkbox. On completion of processing, the AI must sign and date the completed form and file it on the aerodrome file.

Chapter-5 Aerodrome Registration

5.1 Procedure for aerodrome registration.

5.1.1 Purpose

This section applies to those aerodromes operators within the Lao PDR who desire to register an aerodrome under the provisions of RGA for a specific aerodrome. This section is provided to ensure that aerodrome registration is done correctly and consistently on a national basis by describing the:

- process for assessing applications;
- > process for registering an aerodrome;
- legislation governing aerodrome registration;
- staff responsibilities; and
- forms and letters used.

5.1.2 Guidelines

Pursuant to RGA-56, an aerodrome uses for domestic air transportation operation which has a published non-precision or precision instrument approach procedure, conducted by aircraft certified with a maximum take-off weight 5700 kg or more shall only be operated by an organization or individual who has a valid registration issued by DCA for that aerodrome

Airport operator complies with the national standards for airport design and operations provided within the Manual of Standards (MOS) – Aerodromes.

A registered aerodrome must have full serviceability reporting and access to the NOTAM system in the same manner as a certified aerodrome.



5.1.3 Flowchart – Approval Procedures for Aerodrome Registration

5.1.4 Procedure

The Aerodrome Division receives the application package and advises the AAI by minute along with the task number.

The Aerodrome Division also inputs or creates computer system reference details and forwards the application package to the AAI.

Upon receiving the office minute and application package, the AAI shall:

- 1. Advise the applicant of the quotation fee worked out using the form *Estimate for Service* and that the application will not proceed until payment has been received. Input from Flying Operations should be obtained when compiling the application fee.
- 2. Upon receipt of payment, review all documentation ensuring that it is in accordance with RGA. Particularly he shall ensure that all matters set out within RGA and the standards (through reviewing the safety inspection report of MOS and liaison with ATS and ANS have been complied with.
- 3. If the AAI is satisfied that the aerodrome:
 - > can be safely operated by the applicant and
 - that all standards are in accordance with the requirements of the RGA and MOS;

the application may be accepted. Go to 6 below.

- 4. Should the AAI not be satisfied with the information provided with the application or have doubts regarding the aerodrome meeting the necessary physical characteristics, an inspection of the aerodrome should be scheduled or the matter referred to Flying Operations for assessment.
- 5. If the AAI or Flying Operations are not satisfied with the outcome of this assessment, the application shall be refused. A draft letter of refusal for Head, Aerodrome Division should be prepared. See *Refusing an Application* below.
- 6. If accepted, the AAI shall:
 - complete the Aerodrome Registration Checksheet Form 1002(see Chapter 8);
 - advise the Head, Aerodrome Division of acceptance of the aerodrome; and
 - forward the endorsed aerodrome registration checklist to Head, Aerodrome Division.
- 7. The Head, Aerodrome Division reviews the documentation and if satisfied:
 - > approves that the aerodrome be placed on the aerodrome register;
 - > update the aerodrome register; and
 - > signs and returns the aerodrome register checklist to the AAI.

- 8. The AAI shall:
 - > raise a NOTAM notifying AIS of all details to be included within AIP;
 - advise NOF of the names of the persons who are to be the reporting officers;
 - forward a standard letter of acceptance to the applicant. A sample letter is provided at Chapter 8;
 - provide a copy of the NOTAM to the applicant;
 - File the completed aerodrome register checksheet Form 1002 and NOTAM; and
 - > place the aerodrome on the surveillance schedule (if applicable).
- 9. Advise Aerodrome Division of process completion.

5.1.5 Refusing an Application for Registration

If the AAI is not satisfied:

- > that the aerodrome meets the necessary standards; or
- > that the applicant cannot operate the aerodrome in a safe manner;

the application shall be refused.

Written notification of the reason(s) of refusal to register an aerodrome must be provided within 14 days, in accordance with RGA. A sample letter is provided at Chapter 7

The decision to refuse an application is a reviewable decision. Unsuccessful applicants must be advised in writing of the reasons for the refusal to register an aerodrome. All notifications advising of refusal to register an aerodrome must be reviewed by Legal and Enforcement Services before being sent to the applicant. These sentences may not be appropriate for the legal requirements in the RP. Legal advice should be sought.

Applicants who must take further steps to correct any deficiencies before an aerodrome can be registered are responsible for notifying the aerodrome inspector when the required work has been completed.

Note: Aerodrome operators who make an initial application to become registered and do not have an NPA runway or are not covered under the provisions of RGA, shall be given a low priority. Applications for registration of aerodromes where air transport operations occur will be given high priority.

5.1.6 Aerodrome Registration Checksheet

The Aerodrome Inspector and the Aerodrome Division must complete the Aerodrome Registration Checklist (Form 1002) to ensure that each step of the aerodrome registration procedure is completed. A sample of the form is shown at Chapter 8 to this manual.

Satisfactory completion and acceptance of each item is indicated by a tick mark in the relevant checkbox. The date on which the item was accepted must be indicated against each checkbox.

On completion of processing, the AI must sign and date the completed form and file it on the aerodrome file.

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Chapter-6. Authorizing approved persons

6.1 Procedure for authorizing approved persons.

6.1.1 Purpose

This section applies to those persons who may be approved by DCA under the provisions of RGA to conduct a safety inspection of registered aerodromes. This section is provided to ensure that persons are correctly and consistently approved by describing the:

- process for assessing applications;
- legislation governing approvals;
- staff responsibilities; and
- > forms and letters used.

6.1.2 Guidelines

In accordance with RGA, an operator of an aerodrome that is registered must arrange to have an aerodrome safety inspection conducted at least once per year. Safety inspections may be conducted by a DCA Aerodrome Inspector or a person approved by DCA to conduct such inspections. Such persons may be approved by DCA under the provisions of RGA.

Approvals are held unless suspended or cancelled under the provisions of Regulation governing Aerodrome.

6.2 Handling enquiries

Upon a potential applicant contacting DCA seeking to be authorised as an approved person to conduct aerodrome safety inspections, they should be advised that:

- they need to obtain a copy of Regulation Governing Aerodrome;
- an approval granted under the provisions of RGAremains valid from the date of approval unless suspended or cancelled. Approvals may be voluntarily surrendered at which time they would be cancelled;
- it is expected that applicants would have extensive experience within particular aspects of aerodrome planning, maintenance and operation;
- if other qualifications, knowledge and experience are held, DCA must be satisfied that they have the ability to properly perform the aerodrome safety inspection;
- > an interview and test will be undertaken to verify the applicant's knowledge;
- written applications are required. The onus is on the applicant to prove and verify all details on their application. The application must adequately address:
 - contact and business details;
 - tertiary qualifications held;
 - other appropriate courses completed;
 - relevant industry experience;
 - · recent and current positions held;
 - recent ASIs completed (if applicable); and

- any referees that the applicant wishes to nominate;
- ongoing verification of an approved person's work will be conducted by DCA. This may be based on pilot reports or selected scheduled audits;
- an approval granted under the DCA may be suspended or cancelled if the person has not properly carried out, or is no longer properly carrying out, the aerodrome safety inspection function.
- Applicants not meeting the knowledge component (test) may apply for re-testing after 14 days.

6.3 Authorisation procedure for approved persons

6.3.1 Guidelines

Persons conducting an Aerodrome Safety Inspection for registered aerodromes must be approved under the provisions of RGA. An approval granted under RGA remains in force unless the approval is cancelled or suspended.



6.3.2 Flowchart – Proceduresfor Authorising Approved Persons

6.3.3 Procedure

The Aerodrome Division receives the application package and advises the AAI by minute along with the task number.

The Aerodrome Division also inputs or creates computer system reference details and forwards the application package to the AAI.

Upon receiving the office minute and application package:

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- The AAI raises a file and references the application package. An assessment of the application package is made to ensure that all administrative details of the Approved Person Application Checksheet Form 1003 (see checklist at Chapter 8) have been adequately addressed;
- 2. The AAI makes an assessment of the applicant's qualifications to determine if they are in accordance with RGA.

If they are in accordance, go to 3. If the applicants qualifications are not in accordance, assess if other qualifications and experience held by the applicant are considered satisfactory, including:

- has the applicant demonstrated that any qualifications are equivalent or suitable to those nominated within RGA; and
- has the applicant demonstrated that they will be able to properly perform the aerodrome safety inspection in accordance with RGA.

If these aspects are accepted, got to 3, otherwise refuse the application. See 6.3.4 *Refusal to Authorize an Approved Person*.

- To confirm that the applicant has a sound knowledge of the regulations, standards, practices and procedures that are applicable to the operation and maintenance of aerodromes, the applicant will be assessed by an interview and test.
- If the application is accepted, the AAI shall advise the Aerodrome Division and forward the signed approved person application checksheet requesting an approval number.

If refusing an application, see 6.3.4 Refusal to Authorize an Approved Person.

- 5. The Aerodrome Division reviews the process and if satisfied:
 - > endorses the approved person application checklist;
 - updates the approved person's register, noting any conditions that may be applicable and provide advice to update the DCA list of approved persons;
 - advises the AAI of the approval number and return the endorsed checklist to the AAI.
- 6. The AAI shall:
 - advise the applicant by standard letter of the approval including any conditions to which to the approval is subject (see sample letter at Chapter 8).
 - place the approved person application checklist and a copy of the approval letter on the applicant's file.
- 7. Place the approved person on the surveillance schedule.
- 8. Notify Aerodrome Division of completion.
The approval may be subject to conditions. If considering an approval subject to conditions, the AAI should liaise with the Aerodrome Division.

6.3.4 Refusal to Approve a Person

The decision to refuse an application is a reviewable decision. Unsuccessful applicants must be advised in writing of the reasons for the refusal to authorize them as an approved person. Legal and Enforcement Services must review all notifications advising of a refusal before they are sent to the applicant.

The notification of any refusal to approve a person must be sent to the applicant within 14 days of making the decision. A sample letter of refusal is provided at Chapter 7.

An applicant who was unsuccessful in meeting the knowledge component (test) may reapply for approval as an authorized person after 14 days.

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Chapter-7. Aeronautical Study

7.1 Introduction

In terms of aerodrome safety oversight by the DCA, aeronautical study means the study of an aeronautical problem affecting, or closely related to the effect on, an aerodrome or the operation of an aerodrome, including operational procedures. An aeronautical study is one means available to DCA for resolving safety issues.

7.2 When an aeronautical study is appropriate

When an aerodrome does meet the requirement of a standard or practice specified in MOS, the DCA may determine, after carrying out aeronautical studies, only if and where permitted by the standards and practices, the conditions and procedures that are necessary to ensure a level of safety equivalent to that established by the relevant standard or practice.

7.3 Rationale for an aeronautical study

The outcomes of an aeronautical study are to develop and present alternative means to ensure the safety of aircraft operations, to identify the effectiveness of alternative options identified, and to establish procedures or conditions to compensate for non-compliance with statutory requirements.

An aeronautical study will deal with matters beyond mere compliance with published standards. An aeronautical study must assess the impact of deviations from regulatory requirements and safety policy and present alternative effective safety related options. An aeronautical study is usually required where the cost of correcting a violation of a standard, either at design stage or to cater for operational changes, is excessive but the non-conformance aspects of the problem may be overcome by additional, alternative or procedural means that offer both practicable and reasonable solutions (Appendix 4).

A technical analysis is generally the mechanism used to justify a deviation on the grounds that an equivalent level of safety can be attained by other means. In conducting or reviewing a technical analysis, inspectors will be required to draw on their practical experience and specialized knowledge, and to consult other specialists in relevant areas when necessary. When considering alternatives, it is essential to bear in mind the safety objective of the regulatory requirements so that the intent of a regulation, standard or policy directed initially to providing for public safety is not circumvented.

7.4 Approval of an aeronautical study

Only the DCA may accept the recommendations of an aeronautical study and only DCA shall determine any applicable procedures and/or conditions. Where notification to third parties is deemed to be a requirement, it is the responsibility of DCA to ensure advice is published in appropriate Aeronautical Information Service documents. Such publication depends on consideration of the need for a pilot to be

made aware of potentially hazardous conditions, and for DCA to conform to ICAO notification obligations.

7.5 Initiation

Initiation of an Aeronautical Study by DCA requires a proposal to be submitted to the Head of Aerodrome Division, who is the responsible officer to determine if a proposal is acceptable to DCA and who will initiate the study process.

The proposal may be drafted in any suitable format but shall identify the problem in some detail, provide information regarding issues and hazards associated with the problem and enable the Aerodrome Division to decide whether or not to proceed with the development of terms of reference.

If the proposal is acceptable to DCA, the Aerodrome Division will nominate a Team Leader and direct this person to draft the terms of reference for the study.

Terms of reference shall contain:

- Background Information about why the need for the study was identified. The background establishes the context of the study, and should contain a short summary of information gathered to date.
- Objective A short statement outlining the expected accomplishment of the study.
- Study Team Identification of the Team Leader and any initial team members. Team membership may need to be increased as the study progresses to cope with an increasing workload or to deal with provision of specific expertise as necessary, or team members may be released to their other duties as their input is assimilated and no longer required.
- Scope The limitations imposed on the study are to be described, eg in terms of time, location, applicability or other operational factors.
- Initial list of stakeholders Stakeholders are those individuals or organizations who may be affected by a decision arising from the study outputs. It may be that additional stakeholders are identified during the study therefore the initial list may not be exhaustive. Additional stakeholders identified shall be added to the initial stakeholder list.
- Decision maker The decision maker in regard to matters associated with outcomes from the study is to be identified.
- Work Plan Describes the methodology adopted to consult stakeholders, including any public consultation that will be adopted; target dates should be incorporated in the work plan.
- Administration Provide target dates for milestones of the study, including at least the submission date for study results to be provided to

the decision maker. Provide file number references. Provide references to other materials that are related to the study.

- Finance Provide budget details as necessary including instructions for processing payments and claims.
- Special Instructions As aeronautical studies may deal with public issues, they may be politically sensitive. Timely information of progress or critical issues should be provided to Senior Management, using Briefing Notes or Progress Reports to ensure executives are aware of milestones or to be alerted to issues which may need their direct involvement.

7.6 Framework

The framework section contains guidance for the execution of an aeronautical study associated with aerodrome matters. The study model is a risk-based activity, and risk will have different meanings for different persons because each of us may hold differing values for the same thing, and we may view the acceptability of risk in different ways. Risk is a complex issue, and to deal with it in a single manner may not be successful. In this manual when we deal with risk, there are three key issues to consider:

- > The frequency of a potential result, (how often may a loss occur?);
- > The consequence of a loss, (how large may the loss be?); and
- The perception of the loss (how is the loss viewed by stakeholders in terms of its effects?)

Because of the complexity of risk due to the differing values associated by different stakeholders, it is important the decision maker is not reliant on considerations of risk solely in terms of probability and consequence. Risk and alternative control strategies should be evaluated also in terms of the needs, issues and concerns of all the stakeholders, so this framework stresses the importance of involving stakeholders in an aeronautical study from the outset.

An effective communication strategy offers significant benefits to the decision maker because it contributes to well informed decisions and responsible action on the part of stakeholders. The framework is a means to conduct the study in a systematic method and to analyze the risk factors and information with confidence. However, it does not guarantee a formula for correct answers every time. An aeronautical study should be viewed as a tool for effective decision making, not a guarantor of correct decisions.

The goal of risk management is to ensure decision makers identify all possible exposures to loss, and take appropriate action to minimize the risk as much as is reasonably practicable. The technical elements need to be balanced with the social and moral considerations that accompany such decisions, and the key stakeholders should be in accord with such decisions.

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In this six step process each step must be meticulously documented so that appropriate adjustments can be made when unanticipated elements are later introduced and to provide continuity as team members are introduced or depart. Worksheets for documentation are provided at Annex 1 to this Chapter.

7.6.1 Framework initiation

- Define the problem or opportunity and the associated risk issue;
- set up the study team;
- · assign responsibility, authority and resources; and
- begin to identify potential stakeholders.

7.6.2 Preliminary analysis

Define the basic dimensions of the risk problem and undertake an initial identification, analysis and evaluation of potential risks, to see if:

- · a situation exists that needs immediate attention;
- further study is necessary prior to action being taken; or
- the risk problem is not in fact an issue.

7.6.3 Risk estimation

For each identified risk, estimate the frequency of the event occurring and the consequence of any potential losses.

7.6.4 Risk evaluation

Estimate the frequency and consequences of any potential losses. The benefits and operational costs of the activity are integrated into the analysis and each risk is evaluated in terms of the benefits available and the needs, issues and concerns of affected stakeholders. Decide if the risk:

- is acceptable at the current level;
- is not acceptable at any level; or
- might be acceptable if the frequency and or magnitude of the potential loss could be modified.

This deliberation will determine the stakeholder acceptance of risk.

7.6.5 Risk Control

Identify feasible alternatives for reduction of anticipated losses. Controls may either act to reduce frequency of loss or the consequence of the loss should it occur. All risk control options need to be evaluated and ranked in terms of the cost, effectiveness and impact on stakeholders.

7.6.6 Action/monitoring

Implement the most effective risk control option(s), evaluate the effectiveness of the risk management decision process and implement an on-going monitoring program. On-going monitoring may be incorporated in to an existing surveillance program or may be by special arrangement.

As each step of the aeronautical study is completed, a decision is required. The options are:

END The decision process need not be pursued further because:

- ✓ concerns about the risk no longer exist; stakeholders agree the risks to be acceptable, existing controls are deemed to be sufficient, and residual risk is considered to be acceptable; or
- ✓ the stakeholders consider any level of risk as unacceptable.
- GO BACK Repeat one or more of the previous steps to improve accuracy or due to presentation of additional information.
- NEXT STEP/ Proceed to the next logical activity. TAKE ACTION

7.7 Participation

In many aeronautical studies, the proponent is often likely to be a service provider although the process is shared between the service provider and the regulatory element of DCA. During a study under such circumstances, the service provider is likely to be the more active member with regard to monitoring consultations with stakeholders and providing input to the study teams as required. During the review of the completed study, the regulatory element of DCA is the more active component, accepting input from the service provider/stakeholders.

This section describes the principles of regulatory participation in aeronautical studies, and constitutes the DCA policy regarding such situations.

7.7.1 General

Participation by the regulatory element of DCA in aeronautical studies will be done by the Aerodrome Division, or it's delegated representative, as the representative of the Director General. Aerodrome Division should be invited to participate in any aeronautical study initiated by a service provider. Participation by Aerodrome Division should be of benefit to all organizations. DCA will have insight to issues that arise during consultations with stakeholders and the intentions of the study team in addressing them. Thus timely information and advice can be provided to senior management and the DCA Board, and knowledge of problems/issues discovered during the study can facilitate early, informed action within DCA. Service providers can benefit also in that a person with a regulatory perspective can advise the study team on regulatory issues and act s a point of contact with other areasof DCA.

7.7.2 Needs, issues and concerns.

The primary concern of the DCA is that there shall not be any unacceptable increase in the level of risk to aviation safety. This in turn requires consultation between the proponent and the public, to ensure no significant risk remains undiscovered. The DCA also needs to be responsible and accountable to media and government queries about aviation safety matters.

7.7.3 Level of participation

The Aerodrome Division, is a key individual in the aeronautical study process, because (s)he will be involved from start to finish with a study and so is uniquely placed to provide information and insight to a study team whether from industry or from DCA. The Aerodrome Division is responsible for 4 main functions:

- > Represent the needs and concerns of the Director General;
- > Provide information and regulatory advice to the study team;
- > Participate as an expert panelist as necessary; and
- > Provide insight into the study for the Review Team.

As wide variation may occur between aeronautical studies, The Aerodrome Division shall be free to determine his own discretion as to involvement, including in which studies (s)he may become involved with and whether or not a delegate may be assigned to a particular study. Participation in the study process need not be limited to one person. In fact, complex studies will likely require expertise from more than a single officer.

7.8 Review

The primary focus of review is to verify that the analysis is complete and to provide expert advice to the Director General. Reviews will be conducted by a team drawn from regulatory and operational areas of DCA. The review needs to be able to confirm to DCA senior managers and through them to the Board,

whether the implementation of the proposal in the study would cause any unacceptable risk to aviation safety. The report must address any differences of opinion by members of the study team and provide any and all information that will assist the decision maker in reaching a decision. A format for reporting such advice is attached.

The Review Team should comprise at least members from AIS, ADMS, CNS, ATC and FSIS. A facilitator from AERODROME DIVISION will be provided to facilitate team and meeting co-ordination, information collation, and is to be responsible for drafting the review report. Review activities should be adjusted to suit the scope and impact of the study. The review team will normally be required to:

- Confirm the assumptions in the study are reasonable;
- Evaluate data used as reasonable;
- Ensure the stakeholder consultation was appropriate;
- Evaluate the proposal on the basis of acceptability of the associated risk;
- · Evaluate the adequacy of any implementation plan;
- Brief the Aerodrome Division if an immediate risk to safety, or if an issue of interest to the media, is discovered; and
- Make observations, findings, conclusions and recommendations.

In considering a decision on a proposal, the Director General may consider other issues in addition to the review report. For example, a course of action may entail no additional risk but have economic or political repercussions to be addressed. The DG is not bound by the review team report, nor are its recommendations invalidated by the DG's decisions. This process ensures the review team is insulated from influences other than risk management.

In the event of dissent within the review team, because subjective assessments are involved, the team should identify all issues involved in the disagreement and discuss the rationale of each viewpoint to try and reach a solution that is acceptable to all team members. In the case that agreement cannot be

reached, a single report is to be drafted to identify the issues in disagreement and to describe, in a balanced manner, the exact nature of the matters and the rationale of each viewpoint.

7.9 Monitoring

7.9.1 General

Monitoring is the mechanism used to ensure safety assurance extends beyond the aeronautical study itself. The risk inherent in a new system may be the same or less than in the old, but the fact that any change has occurred may give rise to unforeseen hazards. Both the users and providers of services may require a period of adjustment, and the possibility of a hazard persisting during this period must not be overlooked. Monitoring includes an evaluation of the aeronautical study process and an on-going surveillance program.

7.9.2 Policy

The Aerodrome Division is responsible to the Director General for the accomplishment of monitoring. The results of on-going surveillance will be shared with the service provider and other stakeholders at the Director General's discretion.

7.9.3 Concept

DCA monitoring is intended to keep track of items that require inspection or testing, and a database (electronic or paper-based) should be used to identify and 'bringforward' particular items. A database program also ensures no item is overlooked or duplicated. After approval of the outcomes flowing from a study, Aerodrome Division officers designated by the Head will be responsible for monitoring any change in the level of safety achieved.

Efficient monitoring shall be supported by effective planning including critical date identification. Appropriate surveillance methodology may be used, eg telephone call, site inspection audit, internal query etc. Full record keeping and reporting will be provided by the officer involved.

7.9.4 Implementation

A critical element of monitoring is good communication. A variety of methods may be utilized to undertake the monitoring function, including but not limited to phone calls, either to query individuals or to test facilities, audits, letters, documents, site observations, and face-to-face meetings.

7.9.5 Reports

Any suitable format and method of transmission may be used for a monitoring report. To be acceptable, documentation must be signed and dated, and addressed to a particular person. The contents have to identify who did the checks, what was checked, when it was done, what were the results. As necessary, recommendations should be made regarding the need for and timing of further monitoring activity. The report should be presented to Head Aerodrome Division.

RISK ESTIMATION



RISK EVALUATION



Attachment 1

Process flow charts for a typical aeronautical study

INITIATION



PRELIMINARY ANALYSIS



RISK CONTROL



ACTION/MONITORING



Attachment 2

Aerodrome Aeronautical Study Checksheet

Aeronautical Study Identification:

| Step 1 | INITIATION To be completed by the | Head AEROD | ROME | IVISIO | N |
|--------|--|-------------|------|-----------|-------------------------|
| 1 | Aerodrome Aeronautical Study file raised (File number | :) | | 1 | / 200 |
| 2 | Has the problem or opportunity been defined? | | | 1 | / 200 |
| 3 | Have the associated issues been defined? | | | 1 | / 200 |
| 4 | Do other stakeholders share these issues? | | | 1 | / 200 |
| 5 | Identify the decision maker for this study | | | 1 | / 200 |
| 6 | Identify the study team members | | | 1 | / 200 |
| 7 | Have team member assignments been defined for: Responsibility Authority Resources | | | | / 200 / 200 / 200 |
| _ | To be completed by the | Team Leader | | _ | _ |
| 8 | Have potential stakeholders been defined? Within the organization Outside the organization Key stakeholders | | | //// | / 200 / 200 / 200 |
| 9 | Have consultation strategies been defined? | | | 1 | / 200 |

Step 2 PRELIMINARY ANALYSIS

| 1 | Has the system to be analyzed been defined? | 1 | / 200 |
|----|---|---|-------|
| 2 | Establish the scope of decisions | 1 | / 200 |
| 3 | Hypothesize potential risk scenarios | 1 | / 200 |
| | Have hazard and loss types been considered that could result in: | | |
| 4 | Natural, economic, technical or human hazards | 1 | / 200 |
| | Property, income, liability or personal losses | 1 | / 200 |
| 5 | Have all assumptions been acknowledged and logged? | 1 | / 200 |
| 6 | Does an emergency situation exist? | 1 | / 200 |
| 7 | If so, was action taken? | 1 | / 200 |
| 8 | Any other situation existing require immediate action? | 1 | / 200 |
| 9 | Has this action taken place? | 1 | / 200 |
| 10 | Begin stakeholder analysis | 1 | / 200 |
| 11 | Identify and document organizational needs, issues and concerns | 1 | / 200 |
| 12 | Identify and document other stakeholders needs, issues and concerns | 1 | / 200 |
| 13 | After analysis, are issues still relevant? | 1 | / 200 |
| 14 | Have all decisions been documented | 1 | / 200 |

Step 3 RISK ESTIMATION

| OLOP C | | | |
|--------|---|---|-------|
| 1 | Have the frequencies of the risk scenarios been estimated? | 1 | / 200 |
| 2 | Have the consequences of the risk scenarios been estimated? | 1 | / 200 |
| 3 | Are the stakeholders assured with the methods used for items 1 and 2? | 1 | / 200 |
| 4 | Do the stakeholders understand the consequences of the analyses? | 1 | / 200 |
| 5 | Document assumptions and uncertainties for estimations | 1 | / 200 |
| 6 | Update the stakeholder analysis if new information available | 1 | / 200 |
| 7 | Are any issues relevant in the light of new information? | 1 | / 200 |
| 8 | Have the analyses generated increased concerns from stakeholders? | 1 | / 200 |
| 9 | Is information adequate to properly evaluate the risk acceptability? | 1 | / 200 |

Step 4 RISK EVALUATION

| 1 | Have the benefits of the activity associated with the risk been estimated? | | / /200 |
|---|--|---|---------|
| 2 | Have other costs associated with the activity been estimated? | | / /200 |
| 3 | Is it clear which stakeholders bear costs and which ones benefit? | | / /200 |
| 4 | Has benefit-cost or other relevant analyses been performed? | | / / 200 |
| 5 | Document all assumptions and uncertainties. | | / / 200 |
| 6 | Has each risk been evaluated in terms of stakeholder needs, issues and concerns? | ۵ | / /200 |
| 7 | Is there consensus among stakeholders in respect to risk acceptability? | | / / 200 |

Step 5 RISK CONTROL AND FINANCING

| 1 | Have all feasible risk control options been identified? | 1 | / 200 |
|----|---|---|-------|
| 2 | Have risk control options been evaluated for effectiveness in risk reduction? | / | / 200 |
| 3 | Are the assumptions and uncertainties associated with the evaluations known? | / | / 200 |
| 4 | Have the risk control options been evaluated in respect of costs to be incurred? | / | / 200 |
| 5 | Have the risk control options been evaluated in respect of impacts on other stakeholder objectives? | 1 | / 200 |
| 6 | Has the residual risk been evaluated? | 1 | / 200 |
| 7 | Is the residual risk level acceptable to stakeholders? | 1 | / 200 |
| 8 | Is there any uncontrolled losses that require risk financing? | 1 | / 200 |
| 9 | Have all available financing options been identified and evaluated? | 1 | / 200 |
| 10 | Will stakeholders accept the indicated action plan? | | |

Step 6 ACTION AND/OR MONITORING

| oreh o | Action And/or monitoring | | |
|--------|--|----|----------|
| 1 | Has an implementation plan been prepared? | 1 | / 200 |
| 2 | Have strategies for risk control and risk financing been prepared? | 1 | / 200 |
| 3 | Have these options been implemented uniformly across the system? | 1 | / 200 |
| 4 | If not, have the reasons for not doing so been documented? | 1 | / 200 |
| 5 | When will risk control and risk financing strategies be implemented? | 1 | / 200 |
| 6 | Are there any managerial or technical issues outstanding? | 1 | / 200 |
| 7 | How will risk communication strategies be implemented? | 1 | / 200 |
| 0 | Was the Aeronautical Study process effective? | 1 | / 200 |
| 8 | Are any changes necessary? | 1 | / 200 |
| | Has a program has been established to monitor: | 10 | WARD ALL |
| | Changes to the system; | / | / 200 |
| 9 | Proper implementation of air navigation services | 1 | / 200 |
| | Performance of risk control/financing strategies | 1 | / 200 |
| | Validity of assumptions used in the analyses | 1 | / 200 |
| 10 | Is action being taken on feedback from monitoring processes? | 1 | / 200 |
| 11 | If not, have reasons for inaction been documented? | 1 | / 200 |

Tick each box to indicate the satisfactory completion and acceptance of the task. Note the date that each item is completed.

Attachment 3

Aeronautical Review process



During an aeronautical study review, the team is to :

- Confirm that the assumptions used in the study are reasonable;
- Evaluate all data for reasonableness, and when any doubt exists, verify it;
- Assess if the stakeholder list is complete and that consultation occurred;
- Question any part of the study that is unclear;
- To the extent practicable, consider proposals in the context of air navigation requirements;
- Evaluate the proposal(s) solely on the basis of risk acceptability;
- Evaluate the adequacy of the implementation plan;
- Evaluate the proposal and its implementation as a package for the purpose of making a recommendation for monitoring by AERODROME DIVISION;
- Brief the Director General DCA if an immediate risk to safety is discovered;
- Brief the Director General DCA if an issue is likely to attract attention in the media;
- Make observations, findings, conclusions and recommendations as appropriate; and
- Report to the Director General.

In reporting to the Director General, the Head AERODROME DIVISION shall consider the review report in addition to other factors. For example, a course of action that entails no additional risk to aviation safety may have economic effects or political repercussions that need to be addressed at executive or Board level. The DG is not bound by recommendations of the team, nor are the recommendations invalidated by a decision of the DG. This arrangement insulates the review team from influences other than risk based concerns.

Attachment 4

Aeronautical Study-risk ranking matrix

PROBABILITY

| Probability category | | ability ription |
|-------------------------|-----------|---|
| A | HIGH | possibility of repeated events |
| В | MEDIUM | possibility of isolated incidents |
| С | LOW | - occurring sometimes |
| D | RARE | - not likely to occur |
| E | VERY RARE | - highly unlikely |

CONSEQUENCES

| Consequence category | Injury assessment | Property damage | Financial impact | Environmental impact |
|-------------------------|-------------------------|--------------------|---------------------|----------------------|
| 1 | Fatal/major injuries | major | significant | irreversible |
| 2 | Major injuries | medium | moderate | costly to reverse |
| 3 | Minor injuries | small | low | reversible |
| 4 | none | none to slight | minimal | inconsequential |

RISK ASSESSMENT MATRIX

| | Probability | | | | |
|-------------|--|--|--|--|---|
| Consequence | А | В | C | D | E |
| 1 | Extreme risk. Stop activity! | Very high risk Unrealistic activity | High risk Significant risk control needed | Moderate risk Risk control needed | Low risk May need risk control |
| 2 | Very high risk Unrealistic activity | High risk Significant risk control needed | Moderate risk Risk control needed | Low risk May need risk control | Minor risk Minimal risk control |
| 3 | High risk Significant risk control needed | Moderate risk Risk control needed | Low risk May need risk control | Minor risk Minimal risk control | Trivial risk Little or no risk control |
| 4 | Moderate risk Risk control needed | Low risk May need risk control | Minor risk Minimal risk control | Trivial risk Little or no risk control | Nearly zero risk Risk control not needed |

Stakeholder Analysis Worksheet

| Analysis questions | Remarks |
|---|-------------------------------|
| Background, culture, or distinct values which might impact on decisions or on the acceptability of the risks. | |
| Are they at risk? | |
| Do they know or believe they are at risk. | |
| Do they have any control over the risk? | |
| What type of control? | |
| Under what circumstances might such control be exercised? | |
| What is the level of concern regarding the issues? | High D Moderate Unconcerned D |
| How do you know this? | |
| Needs, issues, concerns? | |
| Current knowledge about the proposal, and associated issues? (for each issue – good, average or poor) | |
| How do you know this? | |
| Any knowledge gaps? (regarding the proposal or issues) | |
| Why do you think this? | |
| Any misperceptions regarding the proposal or issues? | |
| Why do you believe this? | |
| Who do they trust? (to manage risk, to undertake analyses, to make decisions, to communicate etc.) | |
| What processes do they trust? (for decision making, analysis, communications) | |

Attachment 5

Scenario Analysis Worksheet

| Framework Items | Remarks | |
|---|------------------------|--|
| Risk Estimation | Assumptions: | |
| Frequency | | |
| Consequences | | |
| Expected value (F x C) | | |
| Risk Evaluation | Assumptions: | |
| Acceptable (end process) | | |
| Not acceptable (end process) | Consultation; | |
| Required mitigation (go to risk control | Reasons for decisions: | |
| Risk Control | Assumptions: | |
| Describe options: | | |
| | | |
| Risk control evaluation | Assumptions: | |
| Effectiveness | | |
| Cost | | |
| Impact on other objectives | | |
| Residual risk | | |
| Residual Risk Evaluation | Assumptions: | |
| Acceptable? | Consultation; | |
| Not acceptable? | Consultation, | |
| Requires further mitigation? | Reasons for decisions: | |
| Preliminary analysis results | Notes: | |
| Immediate action required? | | |
| End process? | | |
| Further analysis required? | | |

8. Standard letters and forms

8.1 Grant of an Aerodrome Certificate

{File reference}

{Applicant's name} {Aerodrome name} {Aerodrome address}

Dear {name of applicant}

Subject: Issue of certificate to operate {name of}aerodrome.

I refer to your letter dated {*dd/mm/yy*} and your application for certification of {*name of*} aerodrome. Your application has been approved and Aerodrome Certificate, number {*XXnnn*} is enclosed.

Your aerodrome willbe subject to regular routine surveillance by Aerodrome Inspectors under the requirements of the DCA aerodrome surveillance program

This activity and any day-to-day matters in relation to your aerodrome will normally be performed on behalf of the DCA by Mr.N N Name as the Aerodrome Inspector assigned to your aerodrome.

If you have any queries regarding this certificate or any other aerodrome-related matters please contact me or your assigned Aerodrome Inspector.

Yours sincerely,

{Name} {Position} {Date}

Manual of Aerodrome Certification procedures

8.2 Refusal to Grant a Certificate

{File reference}

{Applicant's name} {Aerodrome name} {Aerodrome address}

Dear {Name}

Subject: Application for Aerodrome Certificate refused

I refer to your letter dated {*dd/mm/yy*} and your application for certification of {*name of*} aerodrome. Your application has been assessed in accordance with the Regulations governing Aerodromes and has been refused for the following reason(s):

{Delete whichever of the following four paragraphs do not apply}

- a. Following an inspection of the aerodrome's facilities and equipment, I have determined that they do not meet the standards specified for a certified aerodrome.
- b. Following an assessment of the aerodrome's operating procedures I have determined that they do not make satisfactory provision for the safety of aircraft.
- c. Following an assessment of the Aerodrome Manual I have determined that it does not contain the particulars set out in AO 139.105 and the DCA Manual of Standards.
- d. Following assessment of the above facts and other factors listed below, I am not satisfied that you will be able to properly operate and maintain the aerodrome as required by Regulations governing Aerodromes.

{Give details of each determination.}

You were advised of the above deficiencies on {*dd/mm/yy*} and your responses have led me to the conclusion that you are unable to comply with all of the requirements for issue of an aerodrome certificate at this time. Therefore, your application has been refused.

A decision by the DCA to refuse to grant an aerodrome certificate is reviewable by the *{insert body applicable}*

If you have any queries relating to this matter please contact the undersigned on telephone {*nnnn* nnnn} or fax {*nnnn* nnnn}.

Yours sincerely,

{Name} {Position} {Date}

Note: This letter must be prepared and cleared with Legal Counsel before it is sent. Not more than 14 days may elapse from the time the decision to refuse is made and dated, and the time when the applicant is advised of the decision.

8.3 Grant of an Aerodrome Registration

{File reference}

{Applicant's name} {Aerodrome name} {Aerodrome address}

Dear {name of applicant}

Subject: Registration of {name of}aerodrome.

I refer to your letter dated {*dd/mm/yy*} and your application to register {*name of*} aerodrome with DCA. I am pleased to advise your application has been approved and your aerodrome has been placed on the DCA Aerodrome Register .

Registration enables appropriate aeronautical data pertaining to you aerodrome to be published in the Aeronautical Information Publication. Your aerodrome will be subject to regular routine surveillance by Aerodrome Inspectors under the requirements of the DCA aerodrome surveillance program

The DCA safety oversight activity and any day-to-day matters in relation to your aerodrome will normally be performed by Mr. *X X Xxx* as the Aerodrome Inspector assigned to your aerodrome.

If you have any queries regarding this registration or any other aerodrome-related matters please contact me or your assigned Aerodrome Inspector.

Yours sincerely,

{Name} {Position} {Date}

Manual of Aerodrome Certification procedures

8.4 Refusal of an Aerodrome Registration

{File reference}

{Applicant's name} {Aerodrome name} {Aerodrome address}

Dear {name of applicant}

Subject: Registration of {name of}aerodrome.

I refer to your letter dated {*dd/mm/yy*} and your application to register {*name of*} aerodrome with DCA. I have to advise your application has not been approved.

{Delete whichever of the following four paragraphs do not apply}

- a. required information about the aerodrome is inadequate and I have determined that the data indicates that the standards specified for a aerodrome have not been met.
- b. Following an assessment of the aerodrome's safety inspection report I have determined that tit is not in conformity with requirements of Regulations governing Aerodromes therefore the safe operation of the aerodrome cannot be assured.
- c. the person(s) nominated as reporting officer(s) are not satisfactory.

{Give details of each determination.}

You were advised of the above deficiencies on {dd/mm/yy}and your responses have led me to the conclusion that you are unable to comply with all of the requirements for issue of an aerodrome certificate at this time. Therefore, your application has been refused.

A decision by the DCA to refuse to grant an aerodrome registration is reviewable by the{insert body applicable}

If you have any queries regarding this registration or any other aerodrome-related matters please contact me or your assigned Aerodrome Inspector.

Yours sincerely,

{Name} {Position} {Date}

8.5 Aerodrome Safety Inspectionapproval

{File reference}

{Applicant's name} {Aerodrome name} {Aerodrome address}

Dear {name of applicant}

Subject: Approval to conduct Aerodrome Safety Inspection.

I refer to your application dated *dd/mm/yyyy* for approval under the provisions of Regulations governing Aerodromes to conduct aerodrome safety inspections. Your application has been assessed in accordance with the regulation and is approved.

Under the provision of Regulations governing Aerodromes this approval remains in force until and unless it is suspended or cancelled. Your conduct of aerodrome safety inspections shall be under the surveillance of DCA Aerodrome Inspectors. This surveillance, and the day to day matters associated with your approval will usually be performed on behalf of DCA by myself as the inspector assigned to your approval.

Should you have any queries regarding this approval or any other aerodrome related matters, please contact me on *xxx xxxx*.

Yours sincerely

{Name} {Position} {Date}

8.6 Aerodrome Safety Inspection not approved

{File reference}

{Applicant's name} {Aerodrome name} {Aerodrome address}

Dear {name of applicant}

Subject: Application to conduct Aerodrome Safety Inspection.

I refer to your application dated *dd/mm/yyyy* for approval under the provisions of Regulations governing Aerodromes to conduct aerodrome safety inspections. Your application has been assessed in accordance with the regulation and is not approved.

This decision has been made following the process involving: {delete those not relevant}

Consideration of your tertiary qualifications; Other qualifications, knowledge and experience; Examination results; Outcome of the application interview.

{Give details of each determination.}

Should you have any queries regarding this decision or any other aerodrome related matters, please contact the DCA, AERODROME DIVISION on *xxx xxxx*.

Yours sincerely

{Name} {Position} {Date}

8.7 Aerodrome Certification Issue Checksheet

Aerodrome name:

To be completed by the Aerodrome Inspector: Tick each box to indicate the satisfactory completion and acceptance of the task. Note the date that each item is completed.

| 1 | Aerodrome file raised (File number:) | / / 200 |
|----|---|---------|
| 2 | Application checked for completeness | / / 200 |
| 3 | Aerodrome Manual provided with application? | / / 200 |
| 4 | Operational safety discussed with Flight Safety Inspector | / / 200 |
| 5 | Applicant advised of any operational restrictions | / / 200 |
| 6 | Quote prepared and sent to applicant | / / 200 |
| 7 | Fee received from applicant and receipt issued | / / 200 |
| 8 | Aerodrome Manual assessed | / / 200 |
| 9 | Applicant assessed as able to properly operate and maintain | / / 200 |
| 10 | Facilities assessed as acceptable | / / 200 |
| 11 | Aerodrome Safety Management system assessed as acceptable | / / 200 |
| 12 | Applicant advised of any deficiencies | / / 200 |
| 13 | Quote reviewed and outstanding fees received as fully paid | / / 200 |
| 14 | Decision made to grant or refuse certificate | / / 200 |
| 15 | Applicant advised of grant/refusal | / / 200 |
| 16 | Recommendation for issue of certificate | / / 200 |
| 17 | Internal DCA notifications including AIS | / / 200 |
| 18 | Continuing surveillance program established | / / 200 |

| This application is not subject to special conditions. This application has been assessed as acceptable subject to the following special conditions: |
|---|
| |
| |
| |

To be completed by the AERODROME DIVISION:

| I have reviewed the application, its assessment and rec | commendation process and | approve |
|---|--------------------------|---------|
| the issue of the Aerodrome Certificate. | Date : | / /200 |
| Signed: Name : | (AERODROME DI | VISION) |

Finalization action by Aerodrome Inspector:

| Name : | | (A | erodrom | le li | nspector |
|--------|---|----|---------|-------|----------|
| Signe | d: | | Date : | | / /20 |
| 21 | Include the aerodrome in the surveillance program | | | 1 | / 200 |
| 20 | Advise AIS on aerodrome data and NOF of Reporting Officers | | | / | / 200 |
| 19 | Forward the Aerodrome certificate to the applicant | | | 1 | / 200 |

DCA Form 1001, Nov 2009

Manual of Aerodrome Certification procedures

8.8 Aerodrome Registration Checksheet

Aerodrome name:

To be completed by the Aerodrome Inspector: Tick each box to indicate the satisfactory completion and acceptance of the task. Note the date that each item is completed.

| 1 | Aerodrome file raised(File Number:) | 1 | / 200 |
|----|--|-----|-------|
| 2 | Application checked for completeness | 1 | / 200 |
| 3 | Operational safety discussed with Flight Safety | 1 | / 200 |
| 4 | Applicant advised of any operational restrictions | 1 | / 200 |
| 5 | Quote prepared and sent to applicant | 1 | / 200 |
| 6 | Fee received from applicant and receipt issued | - 1 | / 200 |
| 7 | Applicant assessed as able to operate and maintain the aerodrome | 1 | / 200 |
| 8 | Facilities assessed as acceptable by Al | 1 | / 200 |
| 9 | Applicant advised of any deficiencies | 1 | / 200 |
| 10 | Quote reviewed and outstanding fees received and receipted | 1 | / 200 |
| 11 | Registration: accepted DDDrejected | 1 | / 200 |

To be completed by the Head, AERODROME DIVISION:

| I have reviewed the application, its | assessment and recommendation process and approve |
|--------------------------------------|---|
| the registration of this aerodrome. | Date : / /200 |
| Signed: Name : | (Head, AERODROME DIVISION) |

To be completed by the AERODROME DIVISION:

| 1 | Aerodrome Register updated | / / 200 |
|---|--|---------|
| 2 | Application referred to AAI for finalisation | / /200 |

To be completed by the Aerodrome Inspector:

| Raised NOTAM | A and notified NOF of Reporting Officer | 1 | / 200 |
|-------------------|--|---|-------|
| 13 Advised AIS | | 1 | / 200 |
| 14 Forwarded stan | dard letter and copy of NOTAM to applicant | 1 | / 200 |
| Include the ae | erodrome in the surveillance program as | 1 | / 200 |

DCA Form 1002, Nov 2009

8.9 Approved Persons Application Checksheet

Applicant's name:

Approval Number:(once allocated).

To be completed by the Aerodrome Inspector: The aerodrome inspector must ensure that all items on this checklist have been adequately addressed and satisfied by an applicant. Tick each box to indicate the acceptance. On completion, sign and file the completed form.

| 1 | Applicant's contact details (including business hours) | 1 | / 200 |
|---|--|---|-------|
| 2 | Tertiary qualifications held | 1 | / 200 |
| 3 | Other appropriate courses completed | 1 | / 200 |
| Δ | Relevant Industry experience | 1 | / 200 |
| 5 | Current position held | 1 | / 200 |
| 6 | List of recent ASIs undertaken (if applicable) | 1 | / 200 |
| 7 | Referee contact details | 1 | / 200 |

Assessment details:

| Applicant's qualifications meet Regulation governing | | 1 | / 200 |
|--|--|--|--|
| or | | 1 | / 200 |
| suitable; and the person has demonstrated that he/she is able to | | / | / 200 |
| Interview and test results satisfactorily demonstrated the applicant's knowledge of relevant regulations, standards, practices and procedures for the operation and maintenance of aerodromes | | / | / 200 |
| I have reviewed the application and supporting documentation and I agree that the provisions of RGA have been met. □ No □ Yes | | 1 | / 200 |
| Is acceptance as an approved person subject to any conditions? ONO Yes List the conditions: | | 1 | / 200 |
| | Aerodrome or Other qualifications and experience are considered suitable; and the person has demonstrated that he/she is able to properly perform the aerodrome safety inspection Interview and test results satisfactorily demonstrated the applicant's knowledge of relevant regulations, standards, practices and procedures for the operation and maintenance of aerodromes I have reviewed the application and supporting documentation and I agree that the provisions of RGA have been met. No No No No | Aerodrome Image: Construct of the second suitable; and the person has demonstrated that he/she is able to properly perform the aerodrome safety inspection Image: Construct of the second | Aerodrome / or Other qualifications and experience are considered suitable; and / the person has demonstrated that he/she is able to properly perform the aerodrome safety inspection / Interview and test results satisfactorily demonstrated the applicant's knowledge of relevant regulations, standards, practices and procedures for the operation and maintenance of aerodromes / I have reviewed the application and supporting documentation and I agree that the provisions of RGA have been met. / No Yes / Is acceptance as an approved person subject to any conditions? / |

To be completed by the AERODROME DIVISION:

I have reviewed the application and its assessment and recommendation processes, and authorize that the applicant may be included in the authorized person register. Signed: Name : (AERODROME DIVISION)

| 12 | Approval number allocated | | 1 | / 200 |
|----|---|-------|---|-------------|
| _ | Approved person register updated | | 1 | / 200 |
| 13 | Checksheet and package transferred to Aerodrome | | 1 | / 200 |
| 13 | Inspector | line. | 2 | Sales de la |

Finalization by the Aerodrome Inspector:

| Signed: Name : | | (Aerod | rome In | spector) |
|-------------------|--|--------|---------|----------|
| Signer | | Date | | /200 |
| | | | | |
| 15 | Place the approved person on the surveillance schedule | | 1 | / 200 |
| 14 | Acceptance letter forwarded to applicant | | | / 200 |

DCA Form 1003, Nov 2009

Appendix 1



Ministry of Public Works and Transport Department of Civil Aviation (DCA)

APPLICATION FORM FOR AERODROME CERTIFICATION/REGISTRATION

1. Particulars of the Applicant

| Full Name: | |
|------------|--------------|
| Address: | |
| | Postal Code: |
| Position: | |
| Phone: | |

2. Particulars of the Aerodrome Site

| Aerodrome Name: |
|--|
| Real Property Description: |
| Or |
| Geographical Coordinates of the Aerodrome Reference Point (ARP): |
| Or |
| Bearing and Distance from Nearest Town or Populous Area: |
| |

3. Is the Applicant the Owner of the Aerodrome Site?

| Y | es | No |
|----|----|---|
| If | N | 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 airstrip. |

4. Indicate the Largest Type of Aircraft Expected to Use the Aerodrome

.....

Appendix 1

| 5. | Aerodrome data If not applicable, insert NIA (aerodrome data must 6e derived in accord | dance |
|----|--|-------|
| | with Chapter 5 of MOS) | |

| (a) Aerodrome diagram - Provide a diagram to depict the following: (i) runway layout, their magnetic bearing and length in meters; (ii) taxiways and aprons; (iii) aerodrome reference point; (iv) wind direction indicators, both lit and unlit; (v) elevation of the aerodrome (the highest point on the landing surface); (vi) for instrument runway, the elevation of the mid-point of each threshold; (vii) magnetic bearing and distance to the nearest city, town or population centre. |
|---|
| (b) Aerodrome administration |
| Name of aerodrome operators: |
| Address: |
| Tel: (Off/Home) (email) : |
| Is this aerodrome open to public? $Y \square N \square$; Landing Charges: $Y \square N \square$; |
| If Yes, please specify:aerodrome Reporting Officer(s); name and telephone contact details |
| (c) Runway details. For each runway, provide the following: |
| Runway designation:Runway reference code |
| TORAASDALDA |
| |
| width (graded) (O/A) Pavement (surface type) Rating: |
| |
| (d) Aerodrome lighting. For each runway equipped with lighting, provide the following: |
| Runway designation: Runway edge lights: |
| Standby power: Y N; Portable lights: Y N, Precision Approach Light (PAL): Y N |
| if yes PAL frequency: |
| If yes FAL frequency. |
| (e) Ground services: information on services available to visiting pilots: |
| Fuel type: Tel: |
| If more than one fuel supplier, detail: |
| (f) Aerodrome Rescue Fire Fighting (ARFF) Category: |
| (g) Environmental and social consideration (if the requirements below are not complied, the |
| application will be otherwise rejected): |
| Comprehensive airport construction planning, including environmental impact assessment (EIA) |
| □ Aircraft noise zoning: |
| Land acquisition/relocation |
| |
| Transfer of land development right (as applicable) |
| 6. Details to be shown on the Aerodrome Certificate |
| |
| Aerodrome Name: |
| |

Aerodrome Operator:.....

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| On behalf of the Aerodrome operator shown above, I hereby apply to the Aerodrome Certification/Registration. |
|--|
| Signed: |

Name of person making the declaration:

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

Information:

1. The application should be submitted to:

Department of Civil Aviation Wattay International Airport P. O Box 119 Phone: 512163 ext 279 Fax: 512014-44

- 2. Documentary evidence in supporting of all matters in this application may be requested.
- The Certificate will be issued/renewed prior to the expiration of the Certification/Registration minimum four (4) weeks, the inspection will be conducted by DCA to meet the safety.
- 4. Incomplete application may delay in processing the application.
- 5. The fee should be paid after issued/renewed the aerodrome Certification/Registration.

Appendix 2

| ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊ | ຊາຊົນລາວ |
|--|--|
| Lao People's Democratic R | tepublic |
| ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ | ບ ວັດທະນາຖາວອນ |
| Peace Independence Democracy | Unity Prosperity |
| ກະຊວງໂຍຫາທິການ ແລະ ຂົນສິ່ງ | |
| ກິະຊຽງເຍທາທາກນ ແລະ ຂຸ້ມລັງ ກິມການບິນພິນລະເຮືອນ | ເລກທີ:/ກບພຣ |
| | ວັນທີ/Date: |
| Department of Civil Aviation (DCA) | July Date |
| ໃບອະນຸຍາດ | A starting of the second s |
| ນຳໃຊ້ສະໜາມບິນພົນລະເລັ | ຮ້ອນ |
| CIVIL AVIATION AERODROME C ໃບອະນຸຍາດສະບັບນີ້ອອກໃ | The state of the s |
| This Certificate is issued to | |
| ຊື່ເຈົ້າຂອງ/ຜູ້ຄຸ້ມຄອງສະໜາມບິນ AERODROME OWNER/OPERATOR: | |
| ຊື່ສະໜາມບິນ : NAME OF AERODROME: | |
| | Long: |
| ຂະໜາດສູງສຸດຂອງເຄື່ອງບິນທີ່ຈະນາໃຊ້: MASS LIMITATION OF AIRCRAFT TO USE THE AERODROME: | |
| ການົດເວລາຂອງໃບອະນຸຍາດ: VALIDITY OF THE CERTIFICATE: | |
| OPERATION UNDER CONDITION YES Remark: Conditions appears in set forth. | NO NO |
| ໃບອະນຸຍາດນຳໃຊ້ສະໜາມບິນສະບັບນີ້ ໄດ້ຖືກອະນຸຍາດຈາກກິມການບິນພົນລະເຮືອນ, ໂດ ສະບັບເລກທີ: 15702/ຍທຂ, ລົງວັນທີ: 01/09/2014, ວ່າດ້ວຍ ທີ່ຕັ້ງ ແລະ ພາລະບົດເ ສະໜາມບິນ This certificate is issued by the Department of Civil Aviation of Lao PDR pursuant to the Minis article 13.4 on the Management of Aerodrome. | ມາດ, ຢູ່ໃນໝວດທີ III, ວັກ 13.4 ກ່ຽວກັບການ ຄຸ້ມຄອງ stry Decree No. 15702/PWT, dated: 01/09/2014, on Chapter III, |
| ໃບອະນຸຍາດນຳໃຊ້ສະໜາມບິນສະບັບນີ້ໄດ້ຖືກອະນຸຍາດ ພາຍໃຕ້ເງື່ອນໄຂທີ່ມາດຕະການຄ ເຈົ້າຂອງ/ຜູ້ຄຸ້ມຄອງສະໜາມບິນ. The Certificate issued is subjected to the condition set forth on fully compliance to the safety m | |
| ກິມການບິນພິນລະເຮືອນມີສິດ ລິບລ້າງ ຫລື ຖອນໃບອະນຸຍາດ ຖ້າເຫັນວ່າເງື່ອນໃຂທີ່ໄດ້ບິ່ RGA article 13. The Department of Civil Aviation may suspend or revoke at anytime where the | ງໄວ້ຫາກບໍ່ໄດ້ຮັບການປະຕິບັດ. |
| ຫົວໜ້າກົມການບິນພົນລະເ DIRECTOR GENERAL OF THE DEPARTMENT OF C | |
| | |

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22/04/2015 Amend No.3 Page Ap 2-1

| Operation under Exemption Cond | | NO NO | |
|--|-------------------------------|--------------------|------|
| Article under MOS to be Duration: | | | |
| If fail to comply may result in | certificate will be suspended | or revoked by DCA. | |
| | | | |
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LAO PEOPLE'S DEMOCRATIC REPUBLIC Peace, Independence, Democracy, Unity, Prosperity

Ministry of Public Works and Transport Department of Civil Aviation (DCA)

Application for Exemption Form

(In duplicate)

1. DETAIL OF APPLICANT:

1.1 Name of Aerodrome:..... 1.2. Airport Certificate Number:..... 1.3. Full name of applicant (in capital letters): 2. DETAIL OF EXEMPTION: Relevant provision of RGA2010. para 5 and MOS 2009 Chapter3 for which exemption: 2.1. _____ 2.2. The category under which exemption(Temporary/Permanent): _____ _____ Reason why the exemption is needed(The reason provided should be detailed and self explanation): 2.3. _____ _____ 2.4. Period for which exemption is required: _____ _____ If the exemption will affect a particular kind of operation, the detail thereof: 2.5. _____ For temporary exemption, the action for rectification and review of non-compliance, including the 2.6. mitigation measures adopted for ensuring the safety during the exemption period: _____

I hereby certify that the forgoing information is correct in every respect and no relevant information has been withheld. I also understand the responsibility for annually reviewing the condition or mitigation measures and any other resultant non-compliance in particular when any significant changes in the aerodrome activity and development are proposed.

SIGNATURE OF APPLICANT:

Date:

Name:

(In capital letters) Position Held:

(with official seal)

Note:

- 1) It is an offence to make any false representation with the intent to deceive, for the purpose of procuring exemption.
- Application not completed in all respect and not accompanied with relevant enclosures is likely to be rejected.

Appendix 4

ບັນຊີລາຍການກວດກາ ມາດຕະຖານເຄື່ອງຊ່ວຍພາກພື້ນດິນ (VISUAL AID STANDARD CHECKLIST)

Appendix 4-1

1. ບັນຊີລາຍການກວດກາ ມາດຕະຖານເຄື່ອງໝາຍຕ່າງໆສະໜາມບິນ (AERODROME MARKING STANDARD CHECKLIST)



ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ

ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

୶୲୶୶୶ୡ୶ୡ

ກິມການບິນພິນລະເຮືອນ

ພະແນກສະຫນາມບິນ ແລະຮັກສາຄວາມປອດໄພການບິນ

ໃບກວດກາມາດຕະຖານ ເຄື່ອງຫມາຍຕ່າງໆສະໜາມບິນ - Aerodrome Markings

ຈຸດປະສິ່ງເພື່ອ:....

ຊື່ສະໜາມບິນ:..... ລະຫັດຕົວເລກ ແລະ ອັກສອນ:.....

ທີ່ຕັ້ງ :....

| | | ມາດຕະຖານ | ຂໍ້ມູນຕາມມາດ | T | ละเ | ພາບການໃຊ້ | ງານ | |
|-----|--|----------|--------------------|--------------|--------|-----------|-------|--------|
| ລ/ດ | | MOS | ຕະຖານ MOS | ຂໍ້ມູນຕົວຈິງ | ໃຊ້ໄດ້ | ໃຊ້ບໍ່ໄດ້ | ບໍ່ມີ | ໝາຍເຫດ |
| 1 | ເສັ້ນໝາຍທາງແລ່ນຂຶ້ນ-ລົງ (RUNWAY MARKINGS) | | | | | | | |
| 1 | ເສັ້ນໝາຍໃນກາງຫາງແລ່ນ (Runway Center Line Markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | White | | | | | |
| | - ໄລຍະຫ່າງລະຫວ່າງສອງສິ້ນ (Length of Strip and Gap) | 8.3.3.2 | 50m - 75m | | | | | |
| | - ຄວາມຍາວຂອງເສັ້ນຂາດ (Length of Stripe) | 8.3.3.2 | 30m | | | | | |
| | - ໄລຍະຫ່າງຫາເລກຫມາຍສົນເດີນ The first Stripe starts from the RWY Designation Number | 8.3.3.2 | 12m | | | | | |
| | - ຄວາມກວ້າງ (Width of RWY Center Line Markings) | 8.3.3.3 | 0.45m | | | | | |
| 2 | ເລກໝາຍສົ້ນເດີ້ນ (Runway Designation Markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | White | | - | | | |
| | - ถอามยาว (Dimensions of number and Letter) | 8.3.4.5 | 9m | | | | | |
| | - ໄລຍະໜ່າງ (Distance from Threshold to Beginning of Marking) | 8.3.4.5 | 12m | | | | | |
| 3 | ເສັ້ນໝາຍສິ້ນສຸດເດີນ(Runway Transverse Stripe Markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | White | | | | | |
| | - ถอามยาว (Length of Transverse Stripe) | 8.3.5.1 | Full width of RWY | | | | | |
| | - ຄວາມກວ້າງ (Width of Transverse Stripe) | 8.3.5.1 | 1.8m | | | | | |
| 4 | ເສັ້ນໝາຍຂອບເດີ້ນ (Runway Side Stripe markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | White | | | | | |
| | - ຄວາມຍາວ (Length of Runway Side - Stripe marking) | 8.3.6.3 | Full Length of RWY | | | | | |
| _ | - ຄວາມກວ້າງ (Width of Runway Side - Stripe marking) | 8.3.6.2 | 0.45m | | | | | |
| 5 | ເຂດລົງ Runway Aiming Point Markings | | | | | | | |
| | - ଛି (Colour) | 8.2.1.2 | White | | | | | |

CH1 (MACP)

| | 4 | ມາດຕະຖານ | ຂໍ້ມູນຕາມມາດ | 1 0 9 | S E | ມາບການໃຊ້ | ງານ | |
|-----|--|--------------|--------------------|--------------|------------|-----------|-------|--------|
| ລ/ດ | ລາຍການທີ່ກວດກາ | MOS | ตะกาม MOS | ຂໍ້ມູນຕີວຈິງ | ໃຊ້ໄດ້ | ໃຊ້ບໍ່ໄດ້ | ບໍ່ມີ | ໝາຍເຫດ |
| | - ໄລະຫາງ (Distance from Threshold to Beginning of Marking) | 8.3.7.3 | 400m | | | | | |
| | - ຄວາມຍາວ (Length of Stripe) | 8.3.7.3 | 45m - 60m | | | | | |
| | - ຄວາມກວ້າງ (Width of Stripe) | 8.3.7.3 | 6m - 10m | | | | | |
| | - ໄລຍະຫ່າງທາງຂວາງ (Lateral spacing between inner side of Stripe) | 8.3.7.3 | 18m - 22.5m | | | | | |
| 6 | ເສັ້ນໝາຍເຂດແຫະເດີນ (Runway Touchdown Zone Markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | White | | | | | |
| | - ຈຳນວນເສັ້ນ (Pairs of Markings) | 8.3.8.2 | 6 | | | | | |
| | - ໄລຍະຫາງ (Distance from Threshold to Beginning of Marking) | 8.3.8.5 | 150m | | | | | |
| _ | - ຄວາມຍາວເສັ້ນ (Length of Stripe) | figure 8.3-7 | 22.5m | | | | | |
| | - ໄລຍະຫ່າງທາງຂວາງ (Spacing of Stripe) | figure 8.3-7 | 1.5m | | | | | |
| | - ຄວາມກັວາງ (Width of Stripe) | figure 8.3-7 | 1.8m | | | | | |
| | - ໄລຍະຫ່າງທາງຂວາງ (Lateral spacing between inner side of Stripe) | figure 8.3-7 | 18m - 22.5m | | | | | |
| 7 | ເສັ້ນໝາຍສຸດເດີນ (Runway Threshold Markings) | | | | | | 1 | |
| | - ສີ (Colour) | 8.2.1.2 | White | | | | | |
| | - ຄວາມຍາວເສັ້ນຂາດ (Length of Stripe) | 8.3.9.1 | 30m | | | | | |
| | - ຄວາມກວ້າງ (Width of Stripe and Space) | 8.3.9.4 | 1.7m | | | | | |
| | - ຈຳນວນເສັ້ນ (Number of Stripe) | 8.3.9.4 | 12 | | | | | |
| 11 | ເສັ້າໝາຍທາງກິ້ງ (TAXIWAY MARKINGS) | | | | | | | |
| 1 | ເສັ້ນພາທາງ (Taxi Guideline Markings) | | | | | | | |
| | - ឆិ (Colour) | 8.2.1.2 | Yellow | | | | | |
| | - ຄວາມກວ້າງ (Width of Taxi Guideline Markings) | 8.4.2.1 | 0.15m | | | | | |
| | - ໄລຍະຫ່າງ (Distance for run parallel to the RWY Centerline) | 8.4.2.3 | ≥60m | | | | | |
| | - ໄລຍະຫ່າງທາງຂວາງ (Offset from the RWY Centerline) | 8.4.2.3 | 0.9m | | | | | |
| 2 | ເສັ້ນຈອດລໍຖ້າ (Runway Holding Position Markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | Yellow | | | | | |
| | - ຄວາມກວ້າງ (Width of Line) | Figure 8.4-2 | 0.15m | | | | | |
| | - ถอามยาอ (Length of Runway Holding Position) | Figure 8.4-2 | Full width of TWY | | | | | |
| | - ຄວາມຍາວເສັ້ນຂາດ (Length of Stripe Line and Gap) | Figure 8.4-2 | 1.0m | | | | | |
| 3 | ເສັ້ນຂອບທາງກີ້ງ (Taxiway Edge Markings) | | | | | | | |
| | - ສີ (Colour) | 8.2.1.2 | Yellow | | | | | |
| | - ຈຳນວນເສັ້ນ (Number of Continuous lines) | 8.4.5.1 | 2 | | | | | |
| | - ຄວາມກວ້າງເສັ້ນຂາດ (Width and Space of Line) | 8.4.5.1 | 0.15m | | | | | |
| | - ຄວາມຍາວເສັ້ນ (Length of Line) | 8.4.5.1 | Full length of TWY | | | | | |
| 4 | ເຄື່ອງໝາຍແຖບຂວາງ (Transverse Stripes) | | | | | | | |
| | - ଛି (Colour) | 8.3.1.1 | Yellow | | | | | |
| | - ຄວາມກວ້າງ (Width of Line) | 8.9.5 | 0.9m | | | | | |

| | 4 | ມາດຕະຖານ | ຂໍ້ມູນຕາມມາດ | T O O | S E | ພາບການໃຊ້ | ງານ | |
|-----|---|--------------|----------------|--------------|------------|-----------|-------|--------|
| ລ/ດ | ລາຍການທີ່ກວດກາ | MOS | ຕະຖານ MOS | ຂໍ້ມູນຕີວຈິງ | ໃຊ້ໄດ້ | ໃຊ້ບໍ່ໄດ້ | ບໍ່ມີ | ໝາຍເຫດ |
| - | - ຄວາມຍາວ (Length of Line) | 8.9.5 | 7.5m | | | | 1 | |
| - | - ໄລຍະຫ່າງລະຫວ່າງສອງເສັ້ນຢູ່ບ່ອນລັດສະໝີໂຄງ (The Curve so that the Interval Between Stri | 8.9.5 | 15m | | | | | |
| | - ໄລຍະຫຼາງລະຫວ່າງສອງເສັນຢູ່ບ່ອນທີ່ເປັນເສັນຊີ (If deemed desirable to place transverse | 8.9.5 | ≤ 30m | | | | | |
| Ш | ລານຈອດ (APRON MARKINGS) | | | | | | | |
| 1 | ເສັ້ນພາຫາງ (Apron Taxi Guideline Markings) | | | | | | | |
| | - និ (Colour) | 8.2.1.2 | Yellow | | | | | |
| | - ຄວາມກວ້າງ (Width) | 8.5.2.1 | 0.15m | | | | | |
| 2 | ຂອບລາມຈອດ (Apron Edge Markings) | | | | | | | |
| | - ឆិ (Colour) | 8.2.1.2 | Yellow | | | | | |
| _ | - ຈຳນວນເສັ້ນ (Number of Continuous lines) | 8.5.3.1 | 2 | | | | | |
| | - ຄວາມກວ້າງເສັ້ນ (Width and Space of Line) | 8.5.3.1 | 0.15m | | | | | |
| 3 | ຫາງເຂົ້າລານຈອດ (Apron Road Markings) | | | | | | | |
| | - និ (Colour) | 8.5.10.3 | White | | | | | |
| _ | - ຄວາມກວ້າງ (Width of Continuous Line) | 8.5.10.3 | 0.1m | | | | | |
| IV | ຫ້າມບໍລິການ (UNSERVICEABILITY MARKING) | 8.9.2.4 | | | | | | |
| | - និ (Strip colour) | Figure 8.9-2 | White | | | | | |
| | - ຈຳນວນເສັ້ນ (Number strips) | Figure 8.9-2 | 2 strips | | | | | |
| | - ຄວາມກວ້າງ (Strip width) | Figure 8.9-2 | 0.9m | | | | | |
| | - ຄວາມຍາວ (Strip long) | Figure 8.9-2 | 6m | | | | | |
| v | ຖິງລົມ (WIND DIRECTION INDICATOR) | | | | | | | |
| | - ຄວາມສູງຂອງເສົາ (Pole Height) | 8.7.2.1 | 6.5m | | | | | |
| | - ຄວາມຍາວ (The Sleeve long) | 8.7.2.2 | 3.65m | | | | | |
| | - ລັດສະໝີຂອງສອງຂອບ (Diameter of Taper uniformly) | 8.7.2.2 | 900mm to 250mm | | | | | |
| | - ນ້ຳໜັກຂອງຖິງລົມ(Natural or synthetic fibers having weight range of at least) | 8.7.2.4 | 270 - 275g/m2 | | | | | |

ີ່ຫຼີ.....ເດືອນ......ນີ

ຜູ້ກວດສອບ

2. ບັນຊີລາຍການກວດກາ ມາດຕະຖານຂອງລະບົບໄຟສະໜາມບິນ

(AERODROME LIGHTING STANDARD CHECKLIST)



ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ

ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

୶ଌ୶ୠୠୣୄୖୖ

ກິມການບິນພົນລະເຮືອນ

ພະແນກສະຫນາມບິນ ແລະຮັກສາຄວາມປອດໄພການບິນ

<u>ໃບກວດກາມາດຕະຖານ ລະບົບໄຟສະຫນາມບິນ - Aerodrome Lightings</u>

ຈຸດປະສິ່ງເພື່ອ:..... ຊື່ສະໜາມບິນ:......

ທີ່ຕັ້ງ :....

| | ລາຍການທີ່ກວດກາ | ມາດຕະຖານ | | ຂໍ້ມູນຕີວຈິງ | ສະພາບການໃຊ້ງານ | | | - |
|-----|--|-------------|---------------------|--------------|----------------|-----------|-------|--------|
| ລ/ດ | | MOS | | | ໃຊ້ໄດ້ | ໃຊ້ບໍ່ໄດ້ | ບໍ່ມີ | ໝາຍເຫດ |
| 1 | ໄຟແລວລົງເດີນ (Precision approach Category I Lingting system) | | | | | | | |
| - | - Distance of Precision approach lighting system | 9.6.2.2 | 900m | | | | | |
| - | - ຄວາມກວ້າງຂອງຄອດສ໌ບາ (Crossbar Length) | 9.6.2.2 | 30m | | | | | |
| _ | - ໄລຍະຫ່າງຂອງຄອດສັບາ (Crossbar Distance to Threshold) | 9.6.2.2 | 300m | | | | | |
| | - ໄລຍະຫ່າງຂອງແຕ່ລະດອກໄຟ (Intervals of each light) | 9.6.2.3 | 30m | | | | | |
| | - ລະຫວ່າງໄລຍະຫາອິດ (In the innermost 300m of the centerline) | 9.6.2.3 | Single light Source | | | | | |
| - | - ລະຫວ່າງໄລຍະກາງ (In the central 300m of the centerline) | 9.6.2.3 | Two light Source | | | | | |
| - | - ລະຫວ່າງໄລຍະສຸດທ້າຍ (In the outer 300m of the centerline) | 9.6.2.3 | Three light Source | | | | | |
| H | ໄຟມຸມລົງເດີນ (Precision Approach Path Indicator(PAPI) system) | | | | | | | |
| 1 | ໄລຍະຫ່າງຈາກສິ້ນເດີນ (Distance from Runway threshold) | 9.8.4.6 | ≥300 m | | | | | |
| 2 | ໄລຍະຫ່າງຈາກໄຟຂອບເດີນ (Distance from the line of edge lights) | 9.8.4.5 | 15m ± 1m | | | | | |
| 3 | ໄລຍະຫ່າງຂອງແຕ່ລະດອກໄຟ (Interval of each PAPI lights) | 9.8.4.5 | 9m ± 1m | | | | | |
| 4 | ໄຟ PAPI ໄດ້ຕິດຕັ້ງເບື້ອງໃດຂອງທາງແລ່ນ(PAPI is installation) | 9.8.1.2.(b) | | | | | | |
| | + ຕິດຕັ້ງທາງເບື້ອງຊ້າຍ (on Left of Runway) | | | | | | | |
| | + ຕິດຕັ້ງໄວ້ຫາງເບື້ອງຂວາ (on Right of Runway) | | | | | | | |
| 5 | ໄຟ PAPI ຕັ້ງສາກກັບທາງແລ່ນບໍ່?(PAPI perpendicular with Runway) | 9.8.1.2.(c) | | | | | | |
| | + ມູມບ່ຽງຮ້າຍ (Angle on the Left) | | | | | | | |
| - | + ມູມບ່ງອຣວາງ (Angle on the Right) | | | | | | | |
| 6 | ມຸມທາງຕັ້ງຂອງໄພ PAPI (Vertical Angle of PAPI) | 9.8.4.8 | | | | | | |

CH 2-1 (MACP)

| | ລາຍການທີ່ກວດກາ | ມາດຕະຖານ | ຂໍ້ມູນຕາມມາດ ຕະຖານ MOS | ຂໍ້ມູນຕີວຈິງ | ສະພາບການໃຊ້ງານ | | | |
|-----|--|-----------|---------------------------|--------------|----------------|-----------|-------|--------|
| ລ/ດ | | MOS | | | ໃຊ້ໄດ້ | ໃຊ້ບໍ່ໄດ້ | ບໍ່ມີ | ໝາຍເຫດ |
| | + ມູມຂອງດອກໄຟທີ່ 01 (Unit 01 = 6° - 00°30') | | | | | | | |
| | + ມູມຂອງດອກໄຟທີ່ 02 (Unit 02 = 6° - 00°10') | | | | | | | |
| | + ມູມຂອງດອກໄຟທີ່ 03 (Unit 03 = 0° + 00°10') | | | | | | | |
| | +ມູມຂອງດອກໄຟທີ່ 04 (Unit 04 = 0° + 00°30') | | | | | | | |
| 7 | ດອກໄຟແຕ່ລະດອກ ຂະໜານກັນບໍ່(PAPI's Each Units Paratell?) | | | | | | | |
| ш | ໄຟຂອບເດີນ (Runway Edge Lights) | | | | | | | |
| | - ໄລຍະຫ່າງດອກໄຟທາງຍາວ (Longitudinal spacing of lights) | 9.9.4.1 | 60m | | | | | |
| | - ໄລຍະຫ່າງຈາກເສັ້ນໝາຍຂອບເດີນ (Distance from Runway edge marking) | 9.9.5.1 | ≤3m | | | | | |
| IV | ໄຟສຸດເດີ້ນ (Runway End Lights) | | | | | | | |
| | - ໄລຍະຫ່າງຈາກສິ້ນເດີນ (Distance from Runway) | 9.9.15.2 | ≤3m | | | | | |
| | - จำบอบดอกไฟ (Number of lights) | 9.9.15.3 | 6 lights | | | | | |
| v | ໄຟສົ້ນເດີນ (Runway Threshold Lights) | | | | | | | |
| | - ໄລຍະຫ່າງຈາກສິ້ນເດີ່ນ (Distance from runway) | 9.9.10.1 | ≤3m | | | | | |
| | - ໄລຍະຫ່າງຕາມທາງຂວາງ (Interval of each lights) | 9.9.10.2 | 3m | | | | | |
| VI | ໄຟຂອບທາງກິ້ງ (Taxiway Edge Light) | | | | | | | |
| - | - ໄລຍະຫ່າງຈາກຂອບທາງກິງ (Distance from taxiway edge) | 9.12.13.3 | 1.2m | | | | | |
| - | - ໄລຍະຫ່າງຂອງດອກໄຟ (Longitudinal spacing of lights) | 9.12.14.3 | ≤60m | | | | | |

ີ່ຫຼີ.....ບີ.....ນັ້ນທີ່.....ເດືອນ......ບີ.....

ຜູ້ກວດສອບ