CIVIL AVIATION DEPARTMENT
MALDIVES

NOTICE OF PROPOSED RULE MAKING
NPRM NO: 2010-02

23rd September 2010

MCAR 15 – AERONAUTICAL INFORMATION SERVICES
(Initial Issue)

CONTENTS

1. Purpose of this NPRM

The purpose of this NPRM is to consult the industry before issuing MCAR 15 – which sets out standards and recommended practices for Aeronautical Information Services.

2. Background to the Proposal

The objective of the aeronautical information service is to ensure the flow of information/data necessary for the safety, regularity and efficiency of international air navigation.

Civil Aviation Department of Maldives is the responsible authority to provide Aeronautical Information service. The Director of Civil Aviation has delegated the provision of pre flight information service and International NOTAM service to Maldives Airports Company Ltd, in conformity with the requirements specified in this MCAR.

MCAR 15 becomes effective on 01st October 2010

3. Key Stakeholders

The following are identified by the CAD as key stakeholders in the proposed regulations contained in this NPRM:

- MACL
- AIS
- MAT
- TMA
- Regional Airport
- MNDF

4. Submissions on the NPRM

4.1 Submissions are invited

Interested persons are invited to participate in the making of the proposed rules by submitting written data, views, or comments. All submissions will be considered before final action on the proposed rule making is taken.

4.2 How to make a submission

Comments on this proposal may be forwarded (preferably by e-mail), using the NPRM Submission Form given in Appendix 1. The NPRM Submission Form is also available on the CAD website www.aviainfo.gov.mv.

Submissions may be sent by the following methods:

by mail: 11th Floor, Velaanaage
Ameerahmedmagu, Male', 20096,
Republic of Maldives
fax: + 960 3323039

e-mail: safety@aviainfo.gov.mv

4.3 Final date for submissions

Comments must be received before 30 September 2010.

4.4 Availability of the NPRM

Any person may obtain a copy of this NPRM from:
CAD website: www.aviainfo.gov.mv/regulations/nprm.php

or from:

11th Floor, Velaanaage
Ameerahmedmagu, Male', 20096,
Republic of Maldives

4.5 Further Information

For further information contact the Regulation Project Coordinator:

Adam Mufassir
11th Floor, Velaanaage
Ameerahmedmagu, Male', 20096,
Republic of Maldives
Tel: + 960 3324988
Mob: + 960 7787396
e-mail: safety@aviainfo.gov.mv

5 Proposed Rule Amendments

The text of the amendment is arranged to show deleted text and new text as shown below:

~~Text to be deleted is shown with a line through it.~~

New text to be inserted is highlighted with grey shading

5.1 Changes to Civil Aviation Regulations

No changes to CAR.

CIVIL AVIATION DEPARTMENT MALDIVES

Hussain Jaleel
DEPUTY DIRECTOR GENERAL

NPRM No:	**Title:**
Date of your Submission:	**Comment Close-Off Date (as specified in NPRM):**

Please return this response sheet to the Civil Aviation Department by comment close-off date, by e-mail to safety@aviainfo.gov.mv, by post addressed to this Department, 11th floor, Velaanaage, Ameerahmed Magu, Male', or by fax to + 960 3323039

Please indicate your acceptance or otherwise of the proposal by ticking the appropriate box below. Any additional constructive comments, suggested amendments or alternative action will be welcome and may be provided on this response sheet or by separate correspondence.

☐ The proposal is **acceptable without change.**

☐ The proposal is **acceptable but would be improved if the following changes were made:**

_____

_____

_____

_____

☐ The proposal is **not acceptable but would be acceptable if the following changes were made:** (Please provide explanatory comment and use additional pages if required)

_____

_____

_____

_____

_____

☐ The proposal is **not acceptable under any circumstance:** (Explanatory comment must be provided using additional pages if required)

_____

_____

_____

_____

Individual's Details (complete if your submission is on behalf of yourself)		**Organisation's Details (if your submission is on behalf of the organization you represent)**	
Your Name:		Organisation:	
Address:		Address:	
Phone:	Fax:	Phone:	Fax:
E-mail:		E-mail:	
Mobile:		Your Name and Position:	
Signature:		Signature:	

CIVIL AVIATION DEPARTMENT
Republic of Maldives

MALDIVIAN
CIVIL AVIATION REGULATIONS

DRAFT

MCAR-15
AERONAUTICAL INFORMATION SERVICES

Initial Issue 01 October 2010

I. LIST OF AMENDMENT

Amendment No.:	Section and Page No.:	Issue date:	Date Inserted:	Inserted By:	Date Removed:	Removed By:
Initial	All	01-10-10	01-10-10	CAD		

II. LIST OF EFFECTIVE PAGES

Section	Page	Amendment No.	Date
List of Amendments	LOA-1	Initial Issue	01.10.10
List of Effective Pages	LEP-1	Initial Issue	01.10.10
Table of Contents	TOC-1	Initial Issue	01.10.10
Chapter 1 - Introduction	1-1	Initial Issue	01.10.10
Chapter 2 - Definitions	2-1	Initial Issue	01.10.10
Chapter 3 – General	3-1 – 3-7	Initial Issue	01.10.10
Chapter 4 – Aeronautical Information Publication(AIP)	4-1 – 4-4	Initial Issue	01.10.10
Chapter 5 – NOTAM	5-1 – 5-6	Initial Issue	01.10.10
Chapter 6 – Aeronautical Information Regulation and Control(AIRAC)	6-1 – 6-2	Initial Issue	01.10.10
Chapter 7 – Aeronautical Information Circulars	7-1 – 7-2	Initial Issue	01.10.10
Chapter 8 – Pre-flight and Post-flight Information/Data	8-1 – 8-3	Initial Issue	01.10.10
Chapter 9 – Telecommunication Requirements	9-1	Initial Issue	01.10.10
Appendix 1 – Contents of Aeronautical Information Publication	APP1-1 – APP 1-40	Initial Issue	01.10.10
Appendix 2 – NOTAM format	APP 2-1 – APP 2-4	Initial Issue	01.10.10
Appendix 3 – Information to be notified by AIRAC	APP 3-1 – APP 3-2	Initial Issue	01.10.10
Appendix 4 – Aeronautical Data Quality Requirement	APP 4-1 – APP 4-4	Initial Issue	01.10.10

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APPENDICES

CHAPTER 1. INTRODUCTION

The object of the aeronautical information service is to ensure the flow of information/data necessary for the safety, regularity and efficiency of international air navigation. The role and importance of aeronautical information/data changed significantly with the implementation of area navigation (RNAV), required navigation performance (RNP) and airborne computer based navigation systems and data link systems Corrupt or erroneous aeronautical information/data can potentially affect the safety of air navigation.

CHAPTER 2. DEFINITIONS

Refer to MCAR-1

CHAPTER 3. AERONATUICAL INFORMATION SERVICE – GENERAL

3.1 Responsibilities and functions

3.1.1 Civil Aviation Department of Maldives is the responsible authority to provide Aeronautical Information service. The Director of Civil Aviation has delegated the provision of pre flight information service and International NOTAM service to Maldives Airports Company Ltd, in conformity with the requirements specified in this MCAR.

3.1.1.1 The Director of Civil Aviation of Maldives will remain responsible for the information published. Aeronautical information published on behalf of Maldives shall clearly indicate that it is published under the authority of the Director of Civil Aviation Department of Maldives

3.1.1.2 The Director of Civil Aviation will take all necessary measures to implement the mechanism to ensure that the aeronautical information/data provided in relation to territory of Maldives, as well as areas in which Maldives is responsible for air traffic services outside its territory, is adequate, of required quality and timely. This will include arrangements for the timely provision of required information to the aeronautical information service by each of the Maldives services associated with aircraft operations.

3.1.1.3 Where 24-hour service is not provided, service shall be available during the whole period an aircraft is in flight in the area of responsibility of an Aeronautical Information Service, plus a period of at least two hours before and after such a period. The service shall also be available at such other time as may be requested by an appropriate ground organization.

3.1.2 An aeronautical information service shall, in addition, obtain information to enable it to provide pre-flight information service and to meet the need for in-flight information:

a) From the aeronautical information services of other States;

b) From other sources that may be available.

3.1.3 Aeronautical information service obtained under 3.1.2 a) shall, when distributed, be clearly identified as having the authority of the State of Origin.

3.1.4 Aeronautical information/data obtained under 3.1.2 b) shall, if possible, be verified before distribution and if not verified shall, when distributed, be clearly identified as such.

3.1.5 An aeronautical information service shall promptly make available to the aeronautical information services of other States any information necessary for the safety, regularity or efficiency of air navigation required by them, to enable them to comply with 3.1.6 below.

3.1.6 Service providers shall ensure that aeronautical information/data necessary for the safety, regularity and efficiency of air navigation is available in a form suitable for the operational requirements of:

a) flight operations personnel including flight crews, flight planning and flight simulator; and

b) The air traffic services unit responsible for flight information service and the services responsible for pre-flight information.

3.1.7 Civil Aviation Department shall receive and/or originate, collate or assemble, edit, format, publish/store and distribute aeronautical information/data concerning the entire territory of Maldives as well as areas in which Maldives is responsible for air traffic services outside its territory. Aeronautical information shall be published as an Integrated Aeronautical Information Package.

3.2 Quality systems

3.2.1 Service providers shall take all necessary measures to introduce a properly organized quality system containing procedures, processes and resources necessary to implement quality management at each function stage as outlined in 3.1.7 above. The execution of such quality management shall be made demonstrable for each function stage, when required.

3.2.2 The quality system established in accordance with 3.2.1 should be in conformity with AIS guidance manual in the Asia/Pacific Region in 2002 (the International Organization for Standardization (ISO) 9000 series of quality assurance standards, and certified by an approved organization.

3.2.3 Within the context of a quality system, the skills and knowledge required for each function shall be identified and personnel assigned to perform those functions shall be appropriately trained. Service providers shall ensure that personnel possess the skills and competencies required to perform Specific assigned functions, and appropriate records shall be maintained so that the qualifications of personnel can be confirmed. Initial and periodic assessments shall be established that require personnel to demonstrate the required skills and competencies. Periodic assessments of personnel shall be used as a means to detect and correct shortfalls.

3.2.4 Service providers shall ensure that established procedures exist in order that aeronautical data at any moment is traceable to its origin so as to allow any data anomalies or errors, detected during the production/maintenance phases or in operational use, to be corrected.

3.2.5 The established quality system shall provide users with the necessary assurance and confidence that distributed Aeronautical information/data satisfy stated requirements for data quality (accuracy, resolution and integrity) and for data traceability by the use of appropriate procedures in every stage of data production or data modification process. The system shall also provide assurance of the applicability period of intended use of aeronautical data as well as that the agreed distribution dates will be met.

3.2.6 The order of accuracy for aeronautical data, based upon a 95 per cent confidence level, shall be as specified in MCAR 11, Chapter 2, and MCAR 14, Chapter 2. In that respect, three types of positional data shall be identified: surveyed points (e.g. runway thresholds, navigation aid positions, etc.), calculated points (mathematical calculations from the known surveyed points of points in Space, fixes) and declared points (e.g. flight information region boundary points).

3.2.7 Service providers shall ensure that the order of publication resolution of aeronautical data shall be that as specified in Appendices 1 and 5

3.2.8 Service providers shall ensure that the integrity of aeronautical data is maintained throughout the data process from intended user. Aeronautical data integrity requirements shall be based upon the potential risk resulting from the corruption of data and upon the use to which the data item is put. Consequently, the following classifications and data integrity levels shall apply:

a) critical data, integrity level 1×10^{-8} : there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;

b) essential data, integrity level 1×10^{-5} : there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and

c) routine data, integrity level 1×10^{-3} : there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

3.2.9 Aeronautical data quality requirements related to classification and data integrity shall be as provided in Tables 1 to 5 in Appendix 5.0

3.2.10 Protection of electronic aeronautical data while stored or in transit shall be totally monitored by the cyclic redundancy check (CRC). To achieve protection of the integrity level of critical and essential aeronautical data as classified in 2.8, a 32- or 24-bit CRC algorithm shall apply respectively.

3.2.11 To achieve protection of the integrity level of routine aeronautical data as classified in.2.8, a 16-bit CRC algorithm should apply.

3.2.12 Material to be issued as part of the Integrated Aeronautical Information Package shall be thoroughly checked and coordinated with the responsible services before it is submitted to the aeronautical information service, in order to make certain that all necessary information has been included and that it is correct in detail prior to distribution. Validation and verification procedures shall be established which ensure that quality requirements (accuracy, resolution, and integrity) and traceability of aeronautical data are met.

3.2.13 Demonstration of compliance of the quality system applied shall be determined by audit which is done by the Inspectors of the Civil Aviation Department of Maldives If nonconformity is identified, initiating action to correct its cause shall be determined and taken. All audit observations and remedial actions shall be evidenced and properly documented.

3.3 Exchange of aeronautical information/data

3.3. Civil Aviation Department of Maldives is the designated office which all elements of the Integrated Aeronautical Information Package originated by other States shall be addressed. It is the office which is qualified to deal with requests for information originated by other States.

3.3.2 Servide providers shall arrange, as necessary, to satisfy operational requirements for the issuance and receipt of NOTAM distributed by telecommunication.

3.3.3 Service proiders shall wherever practicable, establish direct contact between aeronautical information services in order to facilitate the international exchange of aeronautical information.

3.3.4 One copy of each of the elements of the Integrated Aeronautical Information Package, in paper or electronic form or both, that have been requested by the aeronautical information service of an ICAO Contracting State will be made available by Civil Aviation Department of Maldives in the mutually-agreed form(s), without charge,

3.3.5 It is recommended that the exchange of more than one copy of the elements of the Integrated Aeronautical Information Package and other air navigation documents, including those containing air navigation legislation and regulations, whether in paper and/or electronic form, should be subject to bilateral agreement.

3.3.6 It is recommended that the procurement of aeronautical information, including the elements of the Integrated Aeronautical Information Package, and other air navigation documents, including those containing air navigation legislation and regulations, whether in paper and/or electronic form, by States other than ICAO Contracting States and by other entities should be subject to separate agreement with maldives

3.4 Copyright

Any product of AIS of the Civil Aviation Department which has been granted copyright protection by and provided to another State in accordance with 3.3 shall only be made available to a third party on the condition that the third party is made aware that the product is copyright protected and provided that it is appropriately annotated that the product is subject to copyright by the originating State.

3.5 Cost recovery

The overhead cost of collecting and compiling aeronautical information/data should be included in the cost basis for airport and air navigation services charges, as appropriate, in accordance with the directives given by the Director of Civil Aviation with conformity of principles contained in ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082)

3.6 General specifications

3.6.1 Each element of the Integrated Aeronautical Information Package for international distribution shall include English text for those parts expressed in plain language.

3.6.2 Place names shall be spelt in conformity with local usage, transliterated, when necessary, into the Latin alphabet.

3.6.3 Units of measurement used in the distribution of aeronautical information shall be in consistent with the measurement contained in Annex 5 to the Chicago Convention.

3.6.4 Use of ICAO abbreviations

ICAO abbreviations will be used in the aeronautical information services whenever they are appropriate and their use will facilitate distribution of information.

3.6.5 Use of automation

Automation in AIS should be introduced with the objective of improving the speed, accuracy, efficiency and cost-effectiveness of aeronautical information services.

3.6.6 Identification and delineation of prohibited, restricted and danger areas

3.6.6.1 Each prohibited area, restricted area, or danger area established by Maldives will, upon initial establishment, be given identification and full details shall be promulgated ENR 5.1 of Maldives AIP

3.6.6.2 The identification so assigned will be used to identify the area in all subsequent notifications pertaining to that area.

3.6.6.3 The identification shall be composed of a group of letters and figures as follows:

a) nationality letters which is VR for location indicators assigned to Maldives

b) a letter P for prohibited area, R for restricted area and D for danger area as appropriate;

c) a number, unduplicated within Maldives .

3.6.6.4 To avoid confusion, identification numbers shall not be reused for a period of at least one year after cancellation of the area to which they refer.

3.6.6.5 When a prohibited, restricted or danger area is established, the area should be as small as practicable and be contained within simple geometrical limits, so as to permit ease of reference by all concerned.

3.6.7 Human Factors considerations

The organization of the Aeronautical Information Services as well as the design, contents, processing and distribution of aeronautical information will take into consideration Human Factors principles, which facilitate their optimum utilization.

3.7 Common reference systems for air navigation

3.7.1 Horizontal reference system

3.7.1.1 World Geodetic System — 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system for international air navigation. Consequently, published aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

3.7.1.2 In precise geodetic applications and some air navigation applications, temporal changes in the tectonic plate motion and tidal effects on the Earth's crust should be modeled and estimated. To reflect the temporal effect, an epoch should be included with any set of absolute station coordinates.

3.7.1.3 Geographical coordinates which have been transformed into WGS-84 coordinates but whose accuracy of original field work does not meet the requirements in MCAR 14 and MCAR 11

3.7.1.4 The order of publication resolution of geographical coordinates shall be that specified in Appendix 1 and Table A7-1 of Appendix 4 of this MCAR while the order of chart resolution of geographical coordinates shall be that specified in Annex 4, Appendix 6 Table 1.

3.7.2 Vertical reference system

3.7.2.1 Mean sea level (MSL) datum, which gives the relationship of gravity-related height (elevation) to a surface known as the geoid, shall be used as the vertical reference system for international air navigation. The geoid globally most closely approximates MSL. It is defined as the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents. Gravity-related heights (elevations) are also referred to as orthometric heights while distances of points above the ellipsoid are referred to as ellipsoidal heights.

3.7.2.2 The Earth Gravitational Model — 1996 (EGM-96), containing long wavelength gravity field data to degree and order 360, shall be used by international air navigation as the global gravity model.

Note. — Guidance material concerning EGM-96 is contained in Doc 9674.

3.7.2.3 At those geographical positions where the accuracy of EGM-96 does not meet the accuracy requirements for elevation and geoid undulation specified in Annex 14, Volumes I and II, on the basis of EGM-96 data, regional, national or local geoid models containing high resolution (short wavelength) gravity field data shall be developed and used. When a geoid model other than the EGM-96 model is used, a description of the model used, including the parameters required for height transformation between the model and EGM-96, shall be provided in the Aeronautical Information Publication (AIP).

3.7.2.4 In addition to elevation referenced to the MSL (geoid), for the specific surveyed ground positions, geoid undulation (referenced to the WGS-84 ellipsoid) for those positions specified in Appendix 1 shall also be published.

3.7.2.5 The order of publication resolution of elevation and geoid undulation shall be that specified in Appendix 1 and Table A7-2 of Appendix 4 while the order of chart resolution of elevation and geoid undulation shall be that specified in Annex 4 Appendix 6, Table 2.

3.7.3 Temporal reference system

3.7.3.1 For international civil aviation, the Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system. A value in the time domain is a temporal position measured relative to a temporal reference system.

3.7.3.2 When a different temporal reference system is used for some applications, the feature catalogue, or the metadata associated with an application schema or a data set, as appropriate, shall include either a description of that system or a citation for a document that describes that temporal reference system

CHAPTER 4. AERONAUTICAL INFORMATION PUBLICATIONS (AIP)

AIP is intended primarily to satisfy international requirements for the exchange of aeronautical information of a lasting character essential to air navigation. When practicable, the form of presentation is designed to facilitate their use in flight. AIP constitute the basic information source for permanent information and long duration temporary changes.

4.1 Contents

4.1.1 An Aeronautical Information Publication will contain, in three parts, sections and subsections uniformly referenced to allow for standardized electronic data storage and retrieval, current information relating to, and arranged under, those subjects enumerated in Appendix 1 that appear in roman type, is designed basically to facilitate operational use in flight, the precise format and arrangement be left to the discretion of the Civil Aviation Department of Maldives provided that an adequate table of contents is included.

4.1.1.1 Aeronautical Information Publications would in addition, contain current information relating to those subjects enumerated in Appendix 1

4.1.2 Aeronautical Information Publications will include in Part 1 — General (GEN):

a) A statement of the competent authority which is Director General of Civil Aviation of Maldives, responsible for the air navigation facilities, services or procedures covered by the AIP;

b) The general conditions under which the services or facilities are available for international use;

c) A list of significant differences between the national regulations and practices of Maldives and the related ICAO Standards, Recommended Practices and Procedures, given in a form that would enable a user to differentiate readily between the requirements of Director General of Civil Aviation Department of Maldives and the related ICAO provisions;

d) The choice made by Director of Civil Aviation Department of Maldives in each significant case where an alternative course of action is provided for in ICAO Standards, Recommended Practices and Procedures.

4.1.3 The aeronautical charts listed alphabetically below will when available for designated international aerodromes/ heliports, form part of the AIP, or be distributed separately to recipients of the AIP:

a) Aerodrome/Heliport Chart — ICAO;

b) Aerodrome Ground Movement Chart — ICAO;

c) Aerodrome Obstacle Chart — ICAO Type A;

d) Aerodrome Terrain and Obstacle Chart – ICAO (Electronic)

e) Aircraft Parking/Docking Chart — ICAO

f) Area Chart — ICAO;

g) ATS Surveillance Altitude Chart - ICAO

h) Instrument Approach Chart — ICAO;

i) Precision Approach Terrain Chart — ICAO;

j) Standard Arrival Chart – Instrument (STAR) – ICAO;

k) Standard Departure Chart – Instrumental – (SID) – ICAO;

l) Visual Approach Chart – ICAO.

4.1.4 Charts, maps or diagrams shall be used, when appropriate, to complement or as a substitute for the tabulations or text of Aeronautical Information Publications. Where appropriate, charts produced in conformity with ICAO Annex 4 - Aeronautical Charts, may be used to fulfill this requirement. Guidance material as to the specifications of index maps and diagrams included in Aeronautical Information Publications is contained in the Aeronautical Information Services Manual (Doc 8126).

4.2 General specifications

4.2.1 Each Aeronautical Information Publication shall be self-contained and shall include a table of contents. If it is necessary by reason of bulk or for convenience, to publish an AIP in two or more parts or volumes, each of them will indicate that the remainder of the information is to be found in the other part(s) or volume(s).

4.2.1.1 Each AIP shall not duplicate information within itself or from other sources.

4.2.2 AIP should be published in loose-leaf form unless the complete publication is reissued at frequent intervals.

4.2.3 Each Aeronautical Information Publication shall be dated. In the case of Aeronautical Information Publications issued in loose-leaf form, each page shall be dated. The date, consisting of the day, month (by name) and year, shall be the publication date or the effective date of the information.

4.2.4 A checklist giving the current date of each page in the Aeronautical Information Publication series shall be reissued frequently to assist the user in maintaining a

current publication. The page number/chart title and date of the checklist shall appear on the checklist itself.

4.2.5 Each Aeronautical Information Publication issued as a bound volume and each page of an Aeronautical Information Publication issued in loose-leaf form shall be so annotated as to indicate clearly:

a) The identity of the Aeronautical Information Publication;

b) The territory covered and subdivisions when necessary;

c) The identification of Maldives and producing under the authority of the Director of Civil Aviation Department of Maldives.

d) Page numbers/chart titles;

e) The degree of reliability if the information is doubtful.

4.2.6 The sheet size should be no larger than 210 × 297 mm, except that larger sheets may be used provided they are folded to the same size.

4.2.7 All changes to the AIP, or new information on a reprinted page, shall be identified by a distinctive symbol or annotation.

4.2.8 Operationally significant changes to the AIP shall be published in accordance with AIRAC procedures and shall be clearly identified by the acronym AIRAC.

4.2.9 AIP shall be amended or reissued at such regular intervals as may be necessary to keep them up to date. Recourse to hand amendments or annotations shall be kept to the minimum. The normal method of amendment shall be by means of replacement sheets.

4.2.9.1 The regular interval referred to in 4.2.9 shall be specified in the AIP, Part 1 — General (GEN). Guidance material on the establishment of intervals between publication dates of AIP Amendments is contained in the Aeronautical Information Services Manual (Doc 8126).

4.3 Specifications for AIP Amendments

4.3.1 Permanent changes to the AIP shall be published as AIP Amendments.

4.3.2 Each AIP Amendment shall be allocated a serial number, which shall be consecutive.

4.3.3 Each AIP Amendment page, including the cover sheet, shall display a publication date.

4.3.4 Each AIRAC AIP Amendment page, including the cover sheet, shall display an effective date.

4.3.5 When an AIP Amendment is issued, it shall include references to the serial number of those elements, if any, of the Integrated Aeronautical Information Package, which have been incorporated into the amendment.

4.3.6 A brief indication of the subjects affected by the amendment shall be given on the AIP Amendment cover sheet.

4.3.7 When an AIP Amendment will not be published at the established interval or publication date, a NIL notification shall be originated and distributed by the monthly printed plain-language list of valid NOTAM required as per the para 5.2.13.3.

4.4 Specifications for AIP Supplements

4.4.1 Temporary changes of long duration (three months or longer) and information of short duration, which contains extensive text and/or graphics, shall be published as AIP Supplements.

4.4.2 Each AIP Supplement shall be allocated a serial number, which shall be consecutive and based on the calendar year.

4.4.3 AIP Supplement pages shall be kept in the AIP as long as all or some of their contents remain valid.

4.4.4 When an AIP Supplement is sent in replacement of a NOTAM, it shall include a reference to the serial number of the NOTAM

4.4.5 A checklist of valid AIP Supplements shall be issued at intervals of not more than one month. This information shall be issued through the medium of the monthly printed plain language list of valid NOTAM required as per the para 5.2.13.3.

4.4.6 AIP Supplement pages should be coloured in order to be conspicuous, preferably in yellow.

4.7 AIP Supplement pages should be kept as the first item in the AIP parts.

4.5 Distribution

AIP, AIP Amendments and AIP Supplements shall be made available by the most expeditious means.

CHAPTER 5. AERONAUTICAL INFORAMATION SERVICE -NOTAM

5.1 Origination

5.1.1 A NOTAM shall be originated and issued promptly whenever the information to be distributed is of a temporary nature and of short duration or when operationally significant permanent changes or temporary changes of long duration are made at short notice, except for extensive text and/or graphics Operationally significant changes concerning circumstances are issued under the Aeronautical Information Regulation and Control (AIRAC) system as specified in this MCAR Information of short duration containing extensive text and/or graphics is published as an AIP Supplement

5.1.1.1 A NOTAM shall be originated and issued concerning the following information:

a) Establishment, closure or significant changes in operation of aerodrome(s)/heliport(s) or runways;

b) Establishment, withdrawal and significant changes in operation of aeronautical services (AGA, AIS, ATS, COM, MET, SAR, etc.);

c) Establishment or withdrawal of electronic and other aids to air navigation and aerodromes/heliports. This includes: interruption or return to operation, change of frequencies, and change in notified hours of service, change of identification, change of orientation (directional aids), change of location, power increase or decrease amounting to 50 per cent or more, change in broadcast schedules or contents, or irregularity or unreliability of operation of any electronic aid to air navigation, and air-ground communication services;

d) Establishment, withdrawal or significant changes made to visual aids;

e) Interruption of or return to operation of major components of aerodrome lighting systems;

f) Establishment, withdrawal or significant changes made to procedures for air navigation services;

g) Occurrence or correction of major defects or impediments in the manoeuvring area;

h) Changes to and limitations on availability of fuel, oil and oxygen;

i) Major changes to search and rescue facilities and services available;

j) Establishment, withdrawal or return to operation of hazard beacons marking obstacles to air navigation;

k) Changes in regulations requiring immediate action e.g. prohibited areas for SAR action;

l) Presence of hazards which affect air navigation (including obstacles, military exercises, displays, races and major parachuting events outside promulgated sites);

m) Erecting or removal of, or changes to, obstacles to air navigation in the take-off/climb, missed approach, approach areas and runway strip;

n) Establishment or discontinuance (including activation or deactivation) as applicable, or changes in the status of prohibited, restricted or danger areas;

o) Establishment or discontinuance of areas or routes or portions thereof where the possibility of interception exists and where the maintenance of guard on the VHF emergency frequency 121.5 MHz is required;

p) Allocation, cancellation or change of location indicators;

q) Significant changes in the level of protection normally available at an aerodrome for rescue and firefighting purposes. NOTAM shall be originated only when a change of category is involved and such change of category is involved shall be clearly stated (see Annex 14, Volume I, Chapter 9, and Attachment A, Section 17)

r) Presence or removal of, or significant changes in, hazardous conditions due to snow, slush, ice or water on the movement area;

s) Outbreaks of epidemics necessitating changes in notified requirements for inoculations and quarantine measures;

t) Forecasts of solar cosmic radiation, where provided;

u) an operationally significant change in volcanic activity, the location, date and time of volcanic eruptions and/or horizontal and vertical extent of volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected;

v) release into the atmosphere of radioactive materials or toxic chemicals following a nuclear or chemical incident, the location, date and time of the incident, the flight levels and routes or portions thereof which could be affected and the direction of movement;

w) establishment of operations of humanitarian relief missions, such as those undertaken under the auspices of United Nations, together with procedures and/or limitations which affect air navigation; and

x) Implementation of short-term contingency measures incases of disruption, or partial disruption, of air traffic services and related supporting services.

5.1.1.2 The need for origination of a NOTAM should be considered in any other circumstance which may affect the operations of aircraft.

5.1.1.3 The following information shall not be notified by NOTAM:

a) Routine maintenance work on aprons and taxiways which does not affect the safe movement of aircraft;

b) Runway marking work, when aircraft operations can safely be conducted on other available runways or the equipment used can be removed when necessary;

c) Temporary obstructions in the vicinity of aerodromes/heliports that do not affect the safe operation of aircraft;

d) Partial failure of aerodrome/heliport lighting facilities where such failure does not directly affect aircraft operations;

e) Partial temporary failure of air-ground communications when suitable alternative frequencies are known to be available and are operative;

f) The lack of apron marshalling services and road traffic control;

g) The unserviceability of location, destination or other instruction signs on the aerodrome movement area;

h) Parachuting when in uncontrolled airspace under VFR (see 1.1.1.) when controlled, at promulgated sites or within danger or prohibited areas;

i) Other information of a similar temporary nature.

5.1.1.4 At least seven days' advance notice shall be given of the activation of established danger, restricted or prohibited areas and of activities requiring temporary airspace restrictions other than for emergency operations.

5.1.1.4.1 Notice of any subsequent cancellation of the activities or any reduction of the hours of activity or the dimensions of the airspace should be given as soon as possible. Whenever possible, at least 24 hours' advance notice is desirable, to permit timely completion of the notification process and to facilitate airspace utilization planning.

5.1.1.5 NOTAM notifying unserviceability of aids to air navigation, facilities or communication services shall give an estimate of the period of unserviceability or the time at which restoration of service is expected.

5.1.1.6 When an AIP Amendment or an AIP Supplement is published in accordance with AIRAC procedures, NOTAM shall be originated giving a brief description of the

contents, the effective date and the reference number to the amendment or supplement. This NOTAM shall come into force on the same effective date as the amendment or supplement and shall remain valid in the pre-flight information bulletin for a period of fourteen days. Guidance material for the origination of NOTAM announcing the existence of AIRAC AIP Amendments or AIP Supplements ("Trigger NOTAM") is contained in the Aeronautical Information Services Manual (Doc 8126).

5.2 General specifications

5.2.1 Except as otherwise provided in 5.2.3 and.5.2.4, each NOTAM shall contain the information in the order shown in the NOTAM Format in Appendix 2

5.2.2 Text of NOTAM shall be composed of the significations/uniform abbreviated phraseology assigned to the ICAO NOTAM Code complemented by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language.

5.2.2.1 When NOTAM is selected for international distribution, English text shall be included for those parts expressed in plain language. The ICAO NOTAM Code together with significations/uniform abbreviated phraseology and ICAO Abbreviations are those contained in the PANS-ABC (Doc 8400).

5.2.3 Information concerning an operationally significant change in volcanic activity is not applicable to Maldives. Therefore ASHTAM NOTAM is not applicable to Maldives.

5.2.4 The NOTAM originator shall allocate to each NOTAM a series identified by a letter and a four-digit number followed by a stroke and a two-digit number for the year. The four-digit number shall be consecutive and based on the calendar year. Letters A to Z, with the exception of S and T, may be used to identify a NOTAM series.

5.2.5 When errors occur in a NOTAM, a NOTAM with a new number to replace the erroneous NOTAM shall be issued.

5.2.6 When a NOTAM is issued which cancels or replaces a previous NOTAM, the series and number of the previous NOTAM shall be indicated. The series, location indicator and subject of both NOTAM shall be the same. Only one NOTAM shall be cancelled or replaced by a NOTAM.

5.2.7 Each NOTAM shall deal with only one subject and one condition of the subject. Guidance concerning the combination of a subject and a condition of the subject in accordance with the NOTAM Selection Criteria is contained in the Aeronautical Information Services Manual (Doc 8126).

5.2.8 Each NOTAM shall be as brief as possible and so compiled that its meaning is clear without the need to refer to another document.

5.2.9 Each NOTAM shall be transmitted as a single telecommunication message.

5.210 A NOTAM containing permanent or temporary information of long duration shall carry appropriate AIP or AIP Supplement references.

5.2.11 Location indicators included in the text of a NOTAM shall be those contained in Location Indicators (Doc 7910).

5.2.11.1 In no case shall a curtailed form of such indicators be used.

5.2.11.2Where no ICAO location indicator is assigned to the location, its place name spelt in accordance with.3.6.2 of this MCAR shall be entered in plain language.

5.2.12 A checklist of valid NOTAM shall be issued as a NOTAM over the Aeronautical Fixed Service (AFS) at intervals of not more than one month using the NOTAM Format specified in Appendix 2 One NOTAM shall be issued for each series.

5.2.12.1A checklist of NOTAM shall refer to the latest AIP Amendments, AIP Supplements and at least the internationally distributed AIC.

5.2.12.2A checklist of NOTAM shall have the same distribution as the actual message series to which they refer and shall be clearly identified as checklist.

5..2.12.3A monthly printed plain-language list of valid NOTAM, including indications of the latest AIP Amendments, AIC issued and a checklist of AIP Supplements shall be prepared with a minimum of delay and forwarded by the most expeditious means to recipients of the Integrated Aeronautical Information Package

5.3 Distribution

5.3.1 NOTAM shall be distributed on the basis of a request.

5.3.2 NOTAM shall be prepared in conformity with the relevant provisions of the ICAO communication procedures.

5.3.2.1 The AFS shall, whenever practicable, be employed for NOTAM distribution.

5.3.2.2 When a NOTAM exchanged as specified in.5.3.4 is sent by means other than the AFS, a six-digit date-time group indicating the date and time of NOTAM origination, and the identification of the originator shall be used, preceding the text.

5.3.3, Maldives Airports Company Ltd shall select the NOTAM that are to be given international distribution.

5.3.3.1 Selective distribution lists should be used when practicable. These lists are intended to obviate superfluous distribution of information. Guidance material

relating to this is contained in the Aeronautical Information Services Manual (Doc 8126).

5.3.4 International exchange of NOTAM shall take place only as mutually agreed between the international NOTAM offices concerned.

5.3.4.1 These exchanges of NOTAM between international NOTAM offices shall, as far as practicable, be limited to the requirements of the receiving States concerned by means of separate series providing for at least international and domestic flights.

5.3.5..2A predetermined distribution system for NOTAM transmitted on the AFS shall be used whenever possible, subject to the requirements of 5.3.4.

CHAPTER 6. AERONAUTICAL INFORMATION REGULATION AND CONTROL (AIRAC)

6. 1 General specification

6.1.1 Information concerning the circumstances listed in Appendix 3 Part 1 shall be distributed under the regulated system (AIRAC), i.e. basing establishment, withdrawal or significant changes upon a series of common effective dates at intervals of 28 days, including 29 January 1998. The information notified therein shall not be changed further for at least another 28 days after the effective date, unless the circumstance notified is of a temporary nature and would not persist for the full period.

6.1.2 The regulated system (AIRAC) should also be used for the provision of information relating to the establishment and withdrawal of, and premeditated significant changes in, the circumstances listed in Appendix 3, Part 2.

6.1.3 When information has not been submitted by the AIRAC date, a NIL notification shall be originated and distributed by NOTAM or other suitable means, not later than one cycle before the AIRAC effective date concerned.

6.1.4 Implementation dates other than AIRAC effective dates shall not be used for pre-planned operationally significant changes requiring cartographic work and/or for updating of navigation databases.

6.1.5 The use of the date in the AIRAC cycle, which occurs between 21 December and 17 January inclusive, should be avoided as an effective date for the introduction of significant changes under the AIRAC system.

6.2 Provision of information in paper copy form

6.2.1 In all instances, information provided under the AIRAC system shall be published in paper copy form and shall be distributed by the AIS unit of the Civil Aviation Department of Maldives at least 42 days in advance of the effective date with the objective of reaching recipients at least 28 days in advance of the effective date.

6.2.2 Whenever major changes are planned and where advance notice is desirable and practicable, a publication date of at least 56 days in advance of the effective date should be used.

6.3 Provision of information in electronic form

6.3.1 Civil Aviation Department shall establish an aeronautical database shall, when updating its contents concerning the circumstances listed in Appendix 3, Part 1, ensure that the effective dates of data coincide with the established AIRAC effective dates used for the provision of information in paper copy form.

6.3.2 Information provided in electronic form, concerning the circumstances listed in Appendix 3 Part 1, shall be distributed/made available by the AIS unit so as to reach recipients at least 28 days in advance of the AIRAC effective date.

6.3.3 Whenever major changes are planned and where advance notice is desirable and practicable, information provided in electronic form should be distributed/made available at least 56 days in advance of the effective date.

CHAPTER 7. AERONAUTICAL INFORMATION CIRCULARS (AIC)

7.1 Origination

7.1.1. An AIC shall be originated whenever it is necessary to promulgate aeronautical information, which does not qualify:

a) under the specifications in 4.1 for inclusion in an AIP;

b) under the specifications in 5.1 for the origination of a NOTAM.

7.1.1.1 An AIC shall be originated whenever it is desirable to promulgate:

a) a long-term forecast of any major change in legislation, regulations, procedures or facilities;

b) information of a purely explanatory or advisory nature liable to affect flight safety;

c) information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters. This shall include:

1) forecasts of important changes in the air navigation procedures, services and facilities provided;

2) forecasts of implementation of new navigational systems;

3) significant information arising from aircraft accident/incident investigation which has a bearing on flight safety;

4) information on regulations relating to the safeguarding of international civil aviation against acts of unlawful interference;

5) advice on medical matters of special interest to pilots;

6) warnings to pilots concerning the avoidance of physical hazards;

7) effect of certain weather phenomena on aircraft operations;

8) information on new hazards affecting aircraft handling techniques;

9) regulations relating to the carriage of restricted articles by air;

10) reference to the requirements of, and publication of changes in, national legislation;

11) aircrew licensing arrangements;

12) training of aviation personnel;

13) application of, or exemption from, requirements in national legislation;

14) advice on the use and maintenance of specific types of equipment;

15) actual or planned availability of new or revised editions of aeronautical charts;

16) carriage of radio equipment;

17) explanatory information relating to noise abatement;

18) selected airworthiness directives;

19) changes in NOTAM series or distribution, new editions of AIP or major changes in their contents, coverage or format;

20) other information of a similar nature.

Note. — The publication of an AIC does not remove the obligations set forth in chapter 4th and 5th of this MCAR

7.2 General specifications

7.2.1 AIC shall be issued in printed form. Both text and diagrams may be included.

7.2.1.1 Civil Aviation Department shall select the AIC that are to be given international distribution.

7.2.1.2 Each AIC shall be allocated a serial number which shall be consecutive and based on the calendar year.

7.2.1.3 When AIC are distributed in more than one series each series shall be separately identified by a letter.

7.2.1.4 Differentiation and identification of AIC topics according to subjects using colour coding should be practiced where the numbers of AIC in force are sufficient to make identification in this form necessary.

7.2.2 A checklist of AIC currently in force shall be issued at least once a year, with distribution as for the AIC.

7.3 Distribution

Civil Aviation Department shall give AIC selected for international distribution the same distribution as for the AIP

CHAPTER 8. PRE-FLIGHT AND POST-FLIGHT INFORMATION/DATA

8.1 Pre-flight information

8.1.1 At any aerodrome/heliport normally used for international air operations, aeronautical information essential for the safety, regularity and efficiency of air navigation and relative to the route stages originating at the aerodrome/heliport shall be made available to flight operations personnel, including flight crews and services responsible for pre-flight information.

8.1.2 Aeronautical information provided for pre-flight planning purposes at the aerodromes/heliports referred to in.8.1.1 shall include relevant:

a) elements of the Integrated Aeronautical Information Package;

b) maps and charts.

The documentation listed in a) and b) may be limited to national publications and when practicable, those of immediately adjacent States, provided a complete library of aeronautical information is available at a central location and means of direct communications are available between the aerodrome AIS unit and that library.

8.1.2.1 Additional current information relating to the aerodrome of departure shall be provided concerning the following:

a) construction or maintenance work on or immediately adjacent to the manoeuvring area;

b) rough portions of any part of the manoeuvring area, whether marked or not, e.g. broken parts of the surface of runways and taxiways;

c) presence and depth of snow, ice or water on runways and taxiways, including their effect on surface friction;

d) snow drifted or piled on or adjacent to runways or taxiways;

e) parked aircraft or other objects on or immediately adjacent to taxiways;

f) presence of other temporary hazards;

g) presence of birds constituting a potential hazard to aircraft operations;

h) failure or irregular operation of part or all of the aerodrome lighting system including approach, threshold, runway, taxiway, obstruction and manoeuvring area serviceability lights and aerodrome power supply;

i) failure, irregular operation and changes in the operational status of ILS (including markers), MLS, basic GNSS, SBAS, GBAS, SRE, PAR, DME,

SSR, ATIS, VOR, NDB, VHF aero mobile channels, RVR observing system, and secondary power supply; and

j) presence and operation of humanitarian relief missions, such as those undertaken under the auspices of the United Nations, together with any associated procedures and/or limitations applied thereof.

8.1.3 A recapitulation of current NOTAM and other information of urgent character shall be made available to flight crews in the form of plain-language pre-flight information bulletins (PIB).

8.2 Automated aeronautical information systems

8.2.1 Maldives Airports Company Ltd. uses automated pre-flight information systems to make aeronautical information/data available to operations personnel including flight crew members for self-briefing, flight planning and flight information service purposes, the information/data made available shall comply with the provisions of 8.1.2 and 8.1.3.

8.2.2 It is recommended that automated pre-flight information systems providing a harmonized, common point of access by operations personnel, including flight crew members and other aeronautical personnel concerned, to aeronautical information in accordance with 2.1 and meteorological information in accordance with 9.5.1 of Annex 3 — Meteorological Service for International Air Navigation, should be established by an agreement between the Civil Aviation Department and Maldives Meteorological Services.

8.2.3 Where automated pre-flight information systems are used to provide the harmonized, common point of access by operations personnel, including flight crewmembers and other aeronautical personnel concerned, to aeronautical information/data meteorological information, Maldives Airports company Ltd shall remain responsible for the quality and timeliness of the aeronautical information/data provided by means of such a system. The meteorological department concerned remains responsible for the quality of the meteorological information provided by means of such system in accordance with 9.5.1 of Annex 3.

8.2.4 Self-briefing facilities of an automated pre-flight information system shall provide for access by operations personnel, including flight crew members and other aeronautical personnel concerned, to consultation as necessary with the aeronautical information service by telephone or other suitable telecommunications means. The human/machine interface of such facilities shall ensure easy access in a guided manner to all relevant information/data.

8.2.5 Automated pre-flight information systems for the supply of aeronautical information/data for self-briefing, flight planning and flight information service should:

a) provide for continuous and timely updating of the system database and monitoring of the validity and quality of the aeronautical information stored;

b) permit access to the system by operations personnel including flight crew members, aeronautical personnel concerned and other aeronautical users through suitable telecommunications means;

c) ensure provision, in paper copy form, of the aeronautical information/data accessed, as required;

d) use access and interrogation procedures based on abbreviated plain language and ICAO location indicators, as appropriate, or based on a menu-driven user interface or other appropriate mechanism as agreed between the civil aviation authority and operator concerned; and

e) provide for rapid response to a user request for information.

8.3 Post-flight information

8.3.1 Service provider. shall ensure that arrangements are made to receive at aerodromes/heliports information concerning Maldives and the operation of air navigation facilities noted by aircrews and it also shall ensure that such information is made available to the aeronautical information service of Civil Aviation Department for such distribution as the circumstances necessitate.

8.3.2 Service provider shall ensure that arrangements are made to receive at aerodromes/heliports information concerning the presence of birds observed by aircrews and shall ensure that such information is made available to the aeronautical information service of Civil Aviation Department for such distribution as the circumstances necessitate.

CHAPTER 9. TELECOMMUNICATION REQUIRMENT

9.1. International NOTAM offices shall be connected to the aeronautical fixed service (AFS).The connections shall provide for printed communications.

9.2 Each international NOTAM office shall be connected, through the aeronautical fixed service (AFS), to the following points within the territory for which it provides service:

a) area control centres and flight information centres;

b) aerodromes/heliports at which an information service is established in accordance with this MCAR.

For the Civil Aviation Department
Hussain Jaleel
DEPUTY DIRECTOR GENERAL

APPENDIX 1.

CONTENTS OF AERONAUTICAL INFORMATION PUBLICATION (AIP)

PART 1 — GENERAL (GEN)

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments must be included in each volume.

GEN 0.1 Preface

Brief description of the Aeronautical Information Publication (AIP), including:

1) name of the publishing authority;

2) applicable ICAO documents;

3) the AIP structure and established regular amendment interval; and

4) service to contact in case of detected AIP errors or omissions.

GEN 0.2 Records of AIP Amendments

A record of AIP Amendments and AIRAC AIP Amendments (published in accordance with the AIRAC system) containing:

1) amendment number;

2) publication date;

3) date inserted (for the AIRAC AIP Amendments, effective date); and

4) initials of officer who inserted the amendment.

GEN 0.3 Records of AIP Supplements

A record of issued AIP Supplements containing:

1) Supplement number;

2) Supplement subject;

3) AIP section(s) affected;

4) period of validity; and

5) Cancellation record.

GEN 0.4 Checklist of AIP pages

A checklist of AIP pages containing:

1) page number/chart title; and

2) publication or effective date (day, month by name and year) of the aeronautical information.

GEN 0.5 List of hand amendments to the AIP

A list of current hand amendments to the AIP containing:

1) AIP page(s) affected;

2) amendment text; and

3) AIP Amendment number by which a hand amendment was introduced.

GEN 0.6 Table of contents to Part 1

A list of sections and subsections contained in Part 1 — General (GEN).

Subsections may be listed alphabetically.

GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 Designated authorities

The addresses of designated authorities concerned with the facilitation of international air navigation (civil aviation, meteorology, customs, immigration, health, en-route and aerodrome/heliport charges, agricultural quarantine and aircraft accident investigation) containing, for each authority:

1) designated authority;

2) name of the authority;

3) postal address;

4) telephone number;

5) telefax number;

6) telex number; and

7) aeronautical fixed service (AFS) address.

GEN 1.2 Entry, transit and departure of aircraft

Regulations and requirements for advance notification and applications for permission concerning entry, transit and departure of aircraft on international flights.

GEN 1.3 Entry, transit and departure of passengers and crew

Regulations (including customs, immigration and quarantine, and requirements for advance notification and applications for permission) concerning entry, transit and departure of nonimmigrant passengers and crew.

GEN 1.4 Entry, transit and departure of cargo

Regulations (including customs, and requirements for advance notification and applications for permission) concerning entry, transit and departure of cargo.

Note.— Provisions for facilitating entry and departure for search, rescue, salvage, investigation, repair or salvage in connection with lost or damaged aircraft are detailed in section GEN 3.6, Search and rescue.

GEN 1.5 Aircraft instruments, equipment and flight documents

Brief description of aircraft instruments, equipment and flight documents, including:

1) instruments, equipment (including aircraft communication, navigation and surveillance equipment) and flight documents to be carried on aircraft, including any special requirement in addition to the provisions specified in MCAR OPS 1 Subpart k , Subpart L; and

2) emergency locator transmitter (ELT), signaling devices and life-saving equipment as presented in MCAR OPS 1 1.835 and Annex 6 Part II, 6.4 where so determined by regional air navigation meetings, for flights over designated land areas.

3)

GEN 1.6 Summary of national regulations and international agreements/conventions

A list of titles and references and, where applicable, summaries of national regulations affecting air navigation, together with a list of international agreements/conventions ratified by Maldives

GEN 1.7 Differences from ICAO Standards, Recommended Practices and Procedures

A list of significant differences between national regulations and practices of Maldives and related ICAO provisions, including:

1) provision affected (Annex and edition number, paragraph); and

2) difference in full text.

All significant differences must be listed under this subsection. All Annexes must be listed in numerical order even if there is no difference to an Annex, in which case a NIL notification must be provided. National differences or the degree of non-application of the regional supplementary procedures (SUPPS) must be notified immediately following the Annex to which the supplementary procedure relates.

GEN 2. TABLES AND CODES

GEN 2.1 Measuring system, aircraft markings, and holidays

GEN 2.1.1 Units of measurement

Description of units of measurement used including table of units of measurement.

GEN 2.1.2 Temporal reference system

Description of the temporal reference system (calendar and time system) employed, together with an indication of whether or not daylight saving hours are employed and how the temporal reference system is presented throughout the AIP.

GEN 2.1.3 Horizontal reference system

Brief description of the horizontal (geodetic) reference system used, including name/designation of the reference system;

1) identification of the projection;

2) identification of the ellipsoid used;

3) identification of the datum used;

4) area(s) of application; and

5) an explanation, if applicable, of the asterisk used to identify those coordinates that do not meet MCAR 11 and MCAR 14 accuracy requirements.

GEN 2.3 Chart symbols

A list of chart symbols arranged according to the chart series where symbols are applied.

GEN 2.4 Location indicators

A list of alphabetically arranged location indicators assigned to the locations of aeronautical fixed stations to be used for encoding and decoding purposes. An annotation to locations not connected to the Aeronautical Fixed Service (AFS) must be provided.

GEN 2.1.4 Vertical reference system

Brief description of the vertical reference system used, including:

1) name/designation of the reference system;

2) description of the geoid model used including the parameters required for height transformation between the model used and EGM-96; and

3) an explanation, if applicable, of the asterisk used to identify those elevations/geoid undulations that do not meet Annex 14 accuracy requirements.

GEN 2.1.5 Aircraft nationality and registration marks Indication of aircraft nationality and registration marks adopted by Maldives

GEN 2.1.6 Public holidays

A list of public holidays with indication of services being affected.

GEN 2.2 Abbreviations used in AIS publications

A list of alphabetically arranged abbreviations and their respective significations used by the State in its AIP and in the distribution of aeronautical information/data with appropriate annotation for those national abbreviations that are different from those contained in the *Procedures for Air Navigation Services — ICAO Abbreviations and Codes* (PANS-ABC, Doc 8400).

GEN 2.5 List of radio navigation aids

A list of radio navigation aids arranged alphabetically, containing:

1) identifier;

2) name of the station;

3) type of facility/aid; and

4) indication whether aid serves en-route (E), aerodrome (A) or dual (AE) purposes.

GEN 2.6 Conversion tables

Tables for conversion between:

1) nautical miles and kilometres and vice versa;

2) feet and metres and vice versa;

3) decimal minutes of arc and seconds of arc and vice versa; and

4) other conversion tables, as appropriate.

GEN 2.7 Sunrise/sunset tables

Brief description of criteria used for determination of the times given in the sunrise/sunset tables, together with an alphabetical list of locations for which the times are given with a reference to the related page in the table and the sunrise/sunset tables for the selected stations/locations, including:

1) station name;

2) ICAO location indicator;

3) geographical coordinates in degrees and minutes;

4) date(s) for which times are given;

5) time for the beginning of morning civil twilight;

6) time for sunrise;

7) time for sunset; and

8) time for the end of evening civil twilight.

GEN 3. SERVICES

GEN 3.1 Aeronautical information services

GEN 3.1.1 Responsible service

Description of the Aeronautical Information Service (AIS) provided and its major components, including:

1) service/unit name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number;

6) AFS address;

7) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

8) an indication if service is not H24.

GEN 3.1.2 Area of responsibility

The area of responsibility for the aeronautical information service.

GEN 3.1.3 Aeronautical publications

Description of the elements of the Integrated Aeronautical Information Package, including:

1) AIP and related amendment service;

2) AIP Supplements;

3) AIC;

4) NOTAM and pre-flight information bulletins (PIB);

5) checklists and lists of valid NOTAM; and

6) how they may be obtained.

When an AIC is used to promulgate publication prices that must be indicated in this section of the AIP.

GEN 3.1.4 AIRAC system

Brief description of the AIRAC system provided including a table of present and near future AIRAC dates.

GEN 3.1.5 Pre-flight information service at aerodromes/heliports

A list of aerodromes/heliports at which pre-flight information is routinely available, including an indication of relevant:

1) elements of the Integrated Aeronautical Information Packages held;

2) maps and charts held; and

3) general area of coverage of such data.

GEN 3.1.6 Electronic terrain and obstacle data

Details of how electronic terrain and obstacle data may be obtained, containing:

1) name of the individual, service or organization responsible;

2) street address and e-mail address of the individual, service or organization responsible;

3) telefax number of the individual, service or organization responsible;

4) contact telephone number of the individual, service or organization responsible;

5) hours of service (time period including time zone when contact can be made);

6) online information that can be used to contact the individual, service or organization; and

7) supplemental information, if necessary, on how and when to contact the individual, service or organization.

GEN 3.2 Aeronautical charts

GEN 3.2.1 Responsible service(s)

Description of service(s) responsible for the production of aeronautical charts, including:

1) service name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number;

6) AFS address;

7) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

8) an indication if service is not H24.

GEN 3.2.2 Maintenance of charts

Brief description of how aeronautical charts are revised and amended.

GEN 3.2.3 Purchase arrangements Details of how charts may be obtained, containing:

1) service/sales agency(ies);

2) postal address;

3) telephone number;

4) telefax number;

5) telex number; and

6) AFS address.

GEN 3.2.4 Aeronautical chart series available

A list of aeronautical chart series available followed by a general description of eachseries and an indication of the intended use.

GEN 3.2.5 List of aeronautical charts available

A list of aeronautical charts available, including:

1) title of series;

2) scale of series;

3) name and/or number of each chart or each sheet in a series;

4) price per sheet; and

5) date of latest revision.

GEN 3.2.6 Index to theWorld Aeronautical Chart (WAC) —ICAO 1:1 000 000

An index chart showing coverage and sheet layout for the WAC 1:1 000 000 produced by a State. If Aeronautical Chart — ICAO 1:500 000 is produced instead of WAC 1:1

000 000, index charts must be used to indicate coverage and sheet layout for the Aeronautical Chart — ICAO 1:500 000.

GEN 3.2.7 Topographical charts

Details of how topographical charts may be obtained, containing:

1) name of service/agency(ies);

2) postal address;

3) telephone number;

4) telefax number;

5) telex number; and

6) AFS address.

GEN 3.2.8 Corrections to charts not contained in the AIP

A list of corrections to aeronautical charts not contained in the AIP, or an indication where such information can be obtained.

GEN 3.3 Air traffic services

GEN 3.3.1 Responsible service

Description of the air traffic service and its major components, including:

1) service name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number;

6) AFS address;

7) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

8) an indication if service is not H24.

GEN 3.3.2 Area of responsibility

Brief description of area of responsibility for which air traffic services are provided.

GEN 3.3.3 Types of services Brief description of main types of air traffic services provided.

GEN 3.3.4 Coordination between the operator and ATS

General conditions under which coordination between the operator and air traffic services is effected.

GEN 3.3.5 Minimum flight altitude

The criteria used to determine minimum flight altitudes.

GEN 3.3.6 ATS units address list

A list of ATS units and their addresses arranged alphabetically, containing:

1) unit name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number; and

6) AFS address.

GEN 3.4 Communication services

GEN 3.4.1 Responsible service

Description of the service responsible for the provision of telecommunication and navigation facilities, including:

1) service name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number;

6) AFS address;

7) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

8) an indication if service is not H24.

GEN 3.4.2 Area of responsibility

Brief description of area of responsibility for which telecommunication service is provided.

GEN 3.4.3 Types of service

Brief description of the main types of service and facilities provided, including:

1) radio navigation services;
2) voice and/or data link services;

3) broadcasting service;

4) language(s) used; and

5) an indication of where detailed information can be obtained.

GEN 3.4.4 Requirements and conditions

Brief description concerning the requirements and conditions under which the communication service is available.

GEN 3.5 Meteorological services

GEN 3.5.1 Responsible service

Brief description of the meteorological service responsible for the provision of meteorological information, including:

1) service name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number;

6) AFS address;

7) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

8) an indication if service is not H24.

GEN 3.5.2 Area of responsibility

Brief description of area and/or air routes for which meteorological service is provided.

GEN 3.5.3 Meteorological observations and reports

Detailed description of the meteorological observations and reports provided for international air navigation, including:

1) name of the station and the ICAO location indicator;

2) type and frequency of observation including an indication of automatic observing equipment;

3) types of meteorological reports (e.g. METAR) and availability of a trend forecast;

4) specific type of observation system and number of observation sites used to observe and report surface wind, visibility, runway visual range, cloud base, temperature and, where applicable, wind shear (e.g. anemometer at intersection of runways, transmissometer next to touchdown zone, etc.);

5) hours of operation; and

6) indication of aeronautical climatological information available.

GEN 3.5.4 Types of services

Brief description of the main types of service provided, including details of briefing, consultation, display of meteorological information, flight documentation available for operators and flight crew members, and of the methods and means used for supplying the meteorological information.

GEN 3.5.5 Notification required from operators

Minimum amount of advance notice required by the meteorological authority from operators in respect of briefing,

consultation and flight documentation and other meteorological information they require or change.

GEN 3.5.6 Aircraft reports

As necessary, requirements of the meteorological authority for the making and transmission of aircraft reports.

GEN 3.5.7 VOLMET service Description of VOLMET and/or D-VOLMET service, including:

1) name of transmitting station;

2) call sign or identification and abbreviation for the radio communication emission;

3) frequency or frequencies used for broadcast;

4) broadcasting period;

5) hours of service;

6) list of aerodromes/heliports for which reports and/or forecasts are included; and

7) reports, forecasts and SIGMET information included and remarks.

GEN 3.5.8 SIGMET and AIRMET service

Description of the meteorological watch provided within flight information regions or control areas for which air traffic services are provided, including a list of the meteorological watch offices with:

1) name of the meteorological watch office, ICAO location indicator;

2) hours of service;

3) flight information region(s) or control area(s) served;

4) SIGMET validity periods;

5) specific procedures applied to SIGMET information (e.g. for volcanic ash and tropical cyclones);

6) procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements);

7) the air traffic services unit(s) provided with SIGMET and AIRMET information; and

8) additional information (e.g. concerning any limitation of service, etc.).

GEN 3.5.9 Other automated meteorological services

Description of available automated services for the provision of meteorological information (e.g. automated pre-flight information service accessible by telephone and/or computer modem) including:

1) service name;

2) information available;

3) areas, routes and aerodromes covered; and

4) telephone, telex and telefax number(s).

GEN 3.6 Search and rescue

GEN 3.6.1 Responsible service(s)

Brief description of service(s) responsible for the provision of search and rescue (SAR), including:

1) service/unit name;

2) postal address;

3) telephone number;

4) telefax number;

5) telex number;

6) AFS address; and

7) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed.

GEN 3.6.2 Area of responsibility

Brief description of area of responsibility within which search and rescue services are provided.

GEN 3.6.3 Types of service

Brief description and geographical portrayal, where appropriate, of the type of service and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft.

GEN 3.6.4 SAR agreements

Brief description of SAR agreements in force, including provisions for facilitating entry and departure of other States 'aircraft for search, rescue, salvage, repair or salvage in connection with lost or damaged aircraft, either with airborne notification only or after flight plan notification.

GEN 3.6.5 Conditions of availability

Brief description of provisions for search and rescue, including the general conditions under which the service and facilities are available for international use, including an indication of whether a facility available for search and rescue is specialized in SAR techniques and functions, or is specially used for other purposes but adapted for SAR purposes by training and equipment, or is only occasionally available and has no particular training or preparation for SAR work.

GEN 3.6.6 Procedures and signals used

Brief description of the procedures and signals employed by rescue aircraft and a table showing the signals to be used by survivors.

GEN 4.CHARGES FOR AERODROMES / HELIPORTS AND AIR NAVIGATION SERVICES

Reference may be made to where details of actual charges may be found, if not itemized in this chapter.

GEN 4.1 Aerodrome/heliport charges

Brief description of type of charges which may be applicable at aerodromes/heliports available for international use, including:

1) landing of aircraft;

2) parking, hangarage and long-term storage of aircraft;

3) passenger service;

4) security;

5) noise-related items;

6) other (customs, health, immigration, etc.);

7) exemptions/reductions; and

8) methods of payment.

GEN 4.2 Air navigation services charges

Brief description of charges which may be applicable to air navigation services provided for international use, including:

1) approach control;

2) route air navigation services;

3) cost basis for air navigation services and exemptions/ reductions; and

4) methods of payment.

PART 2 — EN-ROUTE (ENR)

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments must be included in each volume. In the case of an AIP being published as one volume, the annotation "not applicable" must be entered against each of the above subsections.

Reference must be made in the appropriate subsection to indicate that differences between national regulations and ICAO SARPs and procedures exist and that they are detailed in GEN 1.7.

ENR 1.4 ATS airspace classification

The description of ATS airspace classes in the form of the ATS airspace classification table in MCAR 11 appropriately annotated to indicate those airspace classes not used by Maldives.

ENR 1.5 Holding, approach and departure procedures

ENR 1.5.1 General

The requirement is for a statement concerning the criteria on which holding, approach and departure procedures are established. If different from ICAO provisions, the requirement is for presentation of criteria used in a tabular form.

ENR 1.5.2 Arriving flights

The requirement is to present procedures (conventional or area navigation or both) for arriving flights which are common to flights into or within the same type of airspace. If different procedures apply within a terminal airspace, a note to this effect must be given together with a reference to where the specific procedures can be found.

ENR 1.5.3 Departing flights

The requirement is to present procedures (conventional or area navigation or both) for departing flights which are common to flights departing from any aerodrome/heliport.

ENR 0.6 Table of contents to Part 2

A list of sections and subsections contained in Part 2 — En-route.

Note. — Subsections may be listed alphabetically.

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.1 General rules

The requirement is for publication of the general rules as applied within Maldives

ENR 1.2 Visual flight rules

The requirement is for publication of the visual flight rules as applied within Maldives

ENR 1.3 Instrument Flight Rules

The requirement is for publication of the instrument flight rules as applied within Maldives

ENR 1.4 ATS Airspace classification

The description of ATS airspace in the form of the ATS airspace classification table in MCAR 11, Appendix 4, appropriately annotated to indicate those airspace classes not used by Maldives.

ENR 1.5 Holding, approach and departure procedures

ENR 1.5.1 General

The requirement is for the a statement concerning the criteria on which holding , approaching and departure procedures are established . If different from ICAO provisions, the requirement is for presentation of criteria used in a tabular forms.

ENR 1.6 ATS surveillance services and procedures

The description of ATS airspace classes in the form of the ATS airspace classification table in MCAR 11, Appendix 4, appropriately annotated to indicate those airspace classes not used by the State.

ENR 1.6.1 Primary radar

Description of primary radar services and procedures, including:

1) supplementary services;

2) the application of radar control service;

3) radar and air-ground communication failure procedures;

4) voice and CPDLC position reporting requirements; and

5) graphic portrayal of area of radar coverage.

ENR 1.6.2 Secondary surveillance radar (SSR)

Description of secondary surveillance radar (SSR) operating procedures, including:

1) emergency procedures;

2) air-ground communication failure and unlawful interference procedures;

3) the system of SSR code assignment;

4) voice and CPDLC position reporting requirements; and

5) graphic portrayal of area of SSR coverage.

Note.— The SSR description is of particular importance in areas or routes where the possibility of interception exists.

ENR 1.6.3 Automatic dependent surveillance — broadcast (ADS-B)

Description of automatic dependent surveillance — broadcast (ADS-B) operating procedures, including:

1) emergency procedures;

2) air-ground communication failure and unlawful interference procedures;

3) aircraft identification requirements;

4) voice and CPDLC position reporting requirements; and

5) graphic portrayal of area of ADS-B coverage.

Note.— The ADS-B description is of particular importance in areas or routes where the possibility of interception exists.

ENR 1.7 Altimeter setting procedures

The requirement is for a statement of altimeter setting procedures in use, containing:

1) brief introduction with a statement concerning the ICAO documents on which the procedures are based together with differences to ICAO provisions, if any;

2) basic altimeter setting procedures;

3) description of altimeter setting region (s);

4) procedures applicable to operators (including pilots); and

5) table of cruising levels.

ENR 1.8 Regional supplementary procedures

The requirement is for presentation of regional supplementary procedures (SUPPS) affecting the entire area of responsibility, with properly annotated national differences, if any.

ENR 1.9 Air traffic flow management

Brief description of air traffic flow management (ATFM) system, including:

1) ATFM structure, service area, service provided, location of unit(s) and hours of operation;

2) types of flow messages and descriptions of the formats; and

3) procedures applicable for departing flights, containing:

   a) service responsible for provision of information on applied ATFM measures;

   b) flight plan requirements; and

   c) slot allocations.

ENR 1.10 Flight planning

The requirement is to indicate any restriction, limitation or advisory information related to the flight planning stage which may assist the user in the presentation of the intended flight operation, including:

1) procedures for the submission of a flight plan;

2) repetitive flight plan system; and

3) changes to the submitted flight plan.

ENR 1.11 Addressing of flight plan messages

The requirement is for an indication, in tabular form, of the addresses allocated to flight plans, showing:

1) category of flight (IFR, VFR or both);

2) route (into or via FIR and/or TMA); and

3) message address.

ENR 1.12 Interception of civil aircraft

The requirement is for a complete statement of interception procedures and visual signals to be used with a clear indication of whether ICAO provisions are applied and if not, a complete presentation of differences.

ENR 1.13 Unlawful interference

The requirement is for presentation of appropriate procedures to be applied in case of unlawful interference.

ENR 1.14 Air traffic incidents

Description of air traffic incidents reporting system, including:

1) definition of air traffic incidents;

2) use of the "Air Traffic Incident Reporting Form";

3) reporting procedures (including in-flight procedures); and

4) purpose of reporting and handling of the form.

ENR 2. AIR TRAFFIC SERVICES AIRSPACE

ENR 2.1 FIR, UIR, TMA

Detailed description of flight information regions (FIR), upper flight information regions (UIR), and terminal control areas (TMA), including:

1) name, geographical coordinates in degrees and minutes of the FIR/UIR lateral limits and in degrees, minutes and seconds of the TMA lateral limits, vertical limits and class of airspace;

2) identification of unit providing the service;

3) call sign of aeronautical station serving the unit and language(s) used, specifying the area and conditions, when and where to be used, if applicable;

4) frequencies supplemented by indications for specific purposes; and

5) remarks.

Control zones around military air bases not otherwise described in the AIP must be included in this subsection. Where the requirements of Annex 2 concerning flight plans, two-way communications and position reporting apply to all flights in order to eliminate or reduce the need for interceptions and/or where the possibility of interception exists and the maintenance of guard on the VHF emergency channel 121.5 MHz is required, a statement to this effect must be included for the relevant area(s) or portion(s) thereof.

A description of designated areas over which the carriage of an emergency locator transmitter (ELT) is required and where aircraft shall continuously guard the VHF emergency frequency 121.5 MHz, except for those periods when aircraft are carrying out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.

Note.— Other types of airspace around civil aerodromes/ heliports such as control zones and aerodrome traffic zones are described in the relevant aerodrome or heliport section.

ENR 2.2 Other regulated airspace

Where established, a detailed description of other types of regulated airspace and airspace classification.

ENR 3. ATS ROUTES

Note 1.— Bearings, tracks and radials are normally magnetic. In areas of high latitude, where it is determined by the appropriate authority that reference to Magnetic North is impractical, another suitable reference, i.e. True North or Grid North, may be used.

Note 2.— Changeover points established at the midpoint between two radio navigation aids, or at the intersection of the two radials in the case of a route which changes direction between the navigation aids, need not be shown for each route segment if a general statement regarding their existence is made.

ENR 3.1 Lower ATS routes

Detailed description of lower AT S routes, including:

1) route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

2) tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

3) upper and lower limits or minimum en-route altitudes, to the nearest higher 50 m or 100 ft, and airspace classification;

4) lateral limits and minimum obstacle clearance altitudes;

5) direction of cruising levels; and

6) remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address and navigation specification(s) limitations.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.2 Upper ATS routes

Detailed description of upper ATS routes, including:

1) route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

2) tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

3) upper and lower limits and airspace classification;

4) lateral limits;

5) direction of cruising levels; and

6) remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.3 Area navigation routes

Detailed description of area navigation (RNAV) routes, including:

1) route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including "compulsory" or "on-request" reporting points;

2) in respect of waypoints defining a VOR/DME area navigation route, additionally:

   a) station identification of the reference VOR/DME;

   b) bearing to the nearest degree and the distance to the nearest tenth of a kilometre or tenth of a nautical mile from the reference VOR/DME, if the waypoint is not collocated with it; and

   c) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft);

3) geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between defined end-points and distance between each successive designated significant point;

4) upper and lower limits and airspace classification;

5) direction of cruising levels; and

6) remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.4 Helicopter routes

Detailed description of helicopter routes, including:

1) route designator, required navigation performance (RNP) type(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including "compulsory" or "on-request" reporting points;

2) tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

3) upper and lower limits and airspace classification;

4) minimum flight altitudes to the nearest higher 50 m or 100 ft; and

5) remarks, including an indication of the controlling unit and its operating frequency.

Note.— In relation to Annex 11, Appendix 1, and for flight planning purposes, the specified RNP type is not considered to be an integral part of the route designator.

ENR 3.5 Other routes

The requirement is to describe other specifically designated routes which are compulsory within specified area(s).

Note.— Arrival, transit and departure routes which are specified in connection with procedures for traffic to and from aerodromes/heliports need not be described since they are described in the relevant section of Part 3 — Aerodromes.

ENR 3.6 En-route holding

The requirement is for a detailed description of en-route holding procedures, containing:

1) holding identification (if any) and holding fix (navigation aid) or waypoint with geographical coordinates in degrees, minutes and seconds;

2) inbound track;

3) direction of the procedure turn;

4) maximum indicated airspeed;

5) minimum and maximum holding level;

6) time/distance outbound; and

7) indication of the controlling unit and its operating frequency.

Note.— Obstacle clearance criteria related to holding procedures are contained in Procedures for Air Navigation Services, Aircraft Operations *(PANS-OPS, Doc 8168), Volumes I and II.*

ENR 4. RADIO NAVIGATION AIDS/SYSTEMS

ENR 4.1 Radio navigation aids — en-route

A list of stations providing radio navigation services established for en-route purposes and arranged alphabetically by name of the station, including:

1) name of the station and magnetic variation to the nearest degree and for VOR, station declination to the nearest degree used for technical line-up of the aid;

2) identification;

3) frequency/channel for each element;

4) hours of operation;

5) geographical coordinates in degrees, minutes and seconds of the position of the transmitting antenna;

6) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft); and

7) remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

ENR 4.2 Special navigation systems

Description of stations associated with special navigation systems (DECCA, LORAN, etc.), including:

1) name of station or chain;

2) type of service available (master signal, slave signal, color);

3) frequency (channel number, basic pulse rate, recurrence rate, as applicable);

4) hours of operation:

5) geographical coordinates in degrees, minutes and seconds of the position of the transmitting station: and

6) remarks

ENR 4.3 Global navigation satellite system (GNSS)

A list and description of elements of the global navigation satellite system (GNSS) providing the navigation service established for en-route purposes and arranged alphabetically by name of the element, including:

1) the name of the GNSS element (GPS, GLONASS, EGNOS, MSAS, WAAS, etc.);

2) frequency(ies), as appropriate;

3) geographical coordinates in degrees, minutes and seconds of the nominal service area and coverage area; and

4) remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column.

ENR 4.4 Name-code designators for significant points

An alphabetically arranged list of name-code designators (five-letter pronounceable "name-code") established for significant points at positions not marked by the site of radio navigation aids, including:

1) name-code designator;

2) geographical coordinates in degrees, minutes and seconds of the position; and

3) reference to ATS or other routes where the point is located.

ENR 4.5 Aeronautical ground lights en-route

A list of aeronautical ground lights and other light beacons designating geographical positions which are selected by the State as being significant, including:

1) name of the city or town or other identification of the beacon;

2) type of beacon and intensity of the light in thousands of candelas;

3) characteristics of the signal;

4) operational hours; and

5) remarks.

ENR 5. NAVIGATION WARNINGS

ENR 5.1 Prohibited, restricted and danger areas

Description, supplemented by graphic portrayal where appropriate, of prohibited, restricted and danger areas together with information regarding their establishment and activation, including:

1) identification, name and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

2) upper and lower limits; and

3) remarks, including time of activity.

Type of restriction or nature of hazard and risk of interception in the event of penetration must be indicated in the remarks column.

ENR 5.2 Military exercise and training areas and air defence identification zone (ADIZ)

Description, supplemented by graphic portrayal where appropriate, of established military training areas and military exercises taking place at regular intervals, and established air defence identification zone (ADIZ), including:

1) geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

2) upper and lower limits and system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures; and

3) remarks, including time of activity and risk of interception in the event of penetration of ADIZ.

ENR 5.3 Other activities of a dangerous nature and other potential hazards

ENR 5.3.1 Other activities of a dangerous nature

Description, supplemented by charts where appropriate, of activities that could affect flights including:

1) geographical coordinates in degrees and minutes of centre of area and range of influence;

2) vertical limits;

3) advisory measures;

4) authority responsible for the provision of information; and

5) remarks, including time of activity.

ENR 5.3.2 Other potential hazards

Description, supplemented by charts where appropriate, of other potential hazards that could affect flights (e.g. active volcanoes, nuclear power stations, etc.) including:

1) geographical coordinates in degrees and minutes of location of potential hazard;

2) vertical limits;

3) advisory measures;

4) authority responsible for the provision of information; and

5) remarks.

ENR 5.4 Air navigation obstacles

The list of obstacles affecting air navigation in Area 1 (the entire Maldives territory), including:

1) obstacle identification or designation;

2) type of obstacle;

3) obstacle position, represented by geographical coordinates in degrees, minutes and seconds;

4) obstacle elevation and height to the nearest metre or foot;

5) type and colour of obstacle lighting (if any); and

6) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6.

Note 1. — An obstacle whose height above the ground is 100 m and higher is considered an obstacle for Area 1.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations/heights for obstacles in Area 1 are given in Annex 11, Appendix 5, Tables 1 and 2, respectively.

ENR 5.5 Aerial sporting and recreational activities

Brief description, supplemented by graphic portrayal where appropriate, of intensive aerial sporting and recreational activities together with conditions under which they are carried out, including:

1) designation and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

2) vertical limits;

3) operator/user telephone number; and

4) remarks, including time of activity.

Note.— This paragraph may be subdivided into different sections for each different category of activity, giving the indicated details in each case.

ENR 5.6 Bird migration and areas with sensitive fauna

Description, supplemented by charts where practicable, of movements of birds associated with migration, including migration routes and permanent resting areas and areas with sensitive fauna.

ENR 6. EN-ROUTE CHARTS

The requirement is for the En-route Chart — ICAO and index charts to be included in this section.

PART 3 — AERODROMES (AD)

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments must be included in each volume. In the case of an AIP being published as one volume, the annotation "not applicable" must be entered against each of the above

AD 0.6 Table of contents to Part 3

A list of sections and subsections contained in Part 3 — Aerodromes (AD).

Note.— Subsections may be listed alphabetically.

AD1. AERODROMES/HELIPORTS INTRODUCTION

AD1.1 Aerodrome/heliport availability

Brief description of the Sri Lanka's designated authority responsible for aerodromes and heliports, including:

1) the general conditions under which aerodromes/heliports and associated facilities are available for use;

2) a statement concerning the ICAO documents on which the services are based and a reference to the AIP location where differences, if any, are listed;

3) regulations, if any, concerning civil use of military air bases;

4) the general conditions under which the low visibility procedures applicable to Cat II/III operations at aerodromes, if any, are applied;

5) friction measuring device used and the runway friction level below which Maldives will declare the runway to be slippery when wet; and

6) Other information of a similar nature.

AD 1.2 Rescue and firefighting services

AD 1.2.1 Rescue and firefighting services

Brief description of rules governing the establishment of rescue and firefighting services at aerodromes and heliports available for public use together with an indication of rescue and fire-fighting categories established by Maldives .

AD 1.2.2 Snow plan (not applicable for Maldives)

Brief description of general snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur, including:

1) organization of the winter service;

2) surveillance of movement areas;

3) measuring methods and measurements taken;

4) actions taken to maintain the usability of movement areas;

5) system and means of reporting;

6) the cases of runway closure; and

7) distribution of information about snow conditions.

Note.— Where different snow plan considerations apply at aerodromes/heliports, this subparagraph may be subdivided accordingly.

AD 1.3 Index to aerodromes and heliports

A list, supplemented by graphic portrayal, of aerodromes and heliports within Maldives including:

1) aerodrome/heliport name and ICAO location indicator;

2) type of traffic permitted to use the aerodrome/heliport (international/national, IFR/VFR, scheduled/non-scheduled, private); and

3) reference to AIP, Part 3 subsection in which aerodrome/ heliport details are presented.

AD 1.4 Grouping of aerodromes/heliports

Brief description of the criteria applied by Maldives in grouping aerodromes/heliports for the production/distribution/ provision of information purposes (e.g. international/national; primary/secondary; major/other; civil/military; etc.).

AD 1.5 Status of certification of aerodromes

A list of aerodromes in Maldives, indicating the status of certification, includes:

1) aerodrome name and ICAO location indicator;

2) date and if applicable, validity of certification; and

3) remarks if any.

AD 2. AERODROMES

Note.— **** is to be replaced by the relevant ICAO location indicator.

******AD 2.1 Aerodrome location indicator and name**

The requirement is for the ICAO location indicator allocated to the aerodrome and the name of aerodrome. An ICAO location indicator must be an integral part of the referencing system applicable to all subsections in section AD 2.

****** AD 2.2 Aerodrome geographical and administrative data**

The requirement is for aerodrome geographical and administrative data including:

1) aerodrome reference point (geographical coordinates in degrees, minutes and seconds) and its site;

2) direction and distance of aerodrome reference point from centre of the city or town which the aerodrome serves;

3) aerodrome elevation to the nearest metre or foot, and reference temperature;

4) geoid undulation at the aerodrome elevation position to the nearest metre or foot;

5) magnetic variation to the nearest degree, date of information and annual change;

6) name of aerodrome administration, address, telephone, telefax and telex numbers and AFS address;

7) types of traffic permitted to use the aerodrome (IFR/VFR); and

8) remarks.

****** AD 2.3 Operational hours**

Detailed description of the hours of operation of services at the aerodrome, including:

1) aerodrome administration;

2) customs and immigration;

3) health and sanitation;

4) AIS briefing office;

5) ATS reporting office (ARO);

6) MET briefing office;

7) air traffic service;

8) fuelling;

9) handling;

10) security;

11) de-icing; and

12) remarks.

****** AD 2.4 Handling services and facilities**

Detailed description of the handling services and facilities available at the aerodrome, including:

1) cargo-handling facilities;

2) fuel and oil types;

3) fuelling facilities and capacity;

4) de-icing facilities;

5) hangar space for visiting aircraft;

6) repair facilities for visiting aircraft; and

7) remarks.

****** AD 2.5 Passenger facilities**

Brief description of passenger facilities available at the aerodrome, including:

1) *hotel(s) at or in the vicinity of aerodrome;*

2) *restaurant(s) at or in the vicinity of aerodrome;*

3) *transportation possibilities;*

4) medical facilities;

5) *bank and post office at or in the vicinity of aerodrome;*

6) *tourist office;* and

7) remarks.

****** AD 2.6 Rescue and firefighting services**

Detailed description of the rescue and firefighting services and equipment available at the aerodrome, including:

1) aerodrome category for firefighting;

2) rescue equipment;

3) *capability for removal of disabled aircraft;* and

4) remarks.

****** AD 2.7 Seasonal availability — clearing**

Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

1) type(s) of clearing equipment;

2) clearance priorities; and

3) remarks.

****** AD 2.8 Aprons, taxiways and check locations/positions data**

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1) surface and strength of aprons;

2) width, surface and strength of taxiways;

3) location and elevation to the nearest metre or foot of altimeter checkpoints;

4) location of VOR checkpoints;

5) position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and

6) remarks.

If check locations/positions are presented on an aerodrome chart, a note to that effect must be provided under this subsection.

****** AD 2.9 Surface movement guidance and control system and markings**

Brief description of the surface movement guidance and control system and runway and taxiway markings, including:

1) use of aircraft stand identification signs, taxiway guide lines and visual

docking/parking guidance system at aircraft stands;

2) runway and taxiway markings and lights;

3) stop bars (if any); and

4) remarks.

****** AD 2.10 Aerodrome obstacles**

Detailed description of obstacles, including:

1) obstacles in Area 2:

a) obstacle identification or designation;

b) type of obstacle;

c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

d) obstacle elevation and height to the nearest metre or foot;

e) obstacle marking, and type and colour of obstacle lighting (if any);

f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and

g) NIL indication, if appropriate.

Note 1.— ASN 098 provides a description of Area 2 while Appendix 1, Figure A1-2, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 2.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 2 are given in MCAR 14 Appendix 5, Tables A5-1 and A5-2,and in MCAR 11 Appendix 5, Table 1 and 2 respectively.

2) obstacles in Area 3:

a) obstacle identification or designation;

b) type of obstacle;

c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

d) obstacle elevation and height to the nearest metre or foot;

e) obstacle marking, and type and colour of obstacle lighting (if any);

f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and

g) NIL indication, if appropriate.

Note 1 Annex 15 Chapter 10 10.23, provides a description of Area 3 while Appendix 8, Figure A1-3, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 3.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 3 are given in MCAR 14 , Appendix 5, Tables A5-1 and A5-2, respectively.

****** AD 2.11 Meteorological information provided**

Detailed description of meteorological information provided at the aerodrome and an indication of which meteorological office is responsible for the service enumerated, including:

1) name of the associated meteorological office;

2) hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;

3) office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts;

4) availability of the trend forecasts for the aerodrome, and interval of issuance;

5) information on how briefing and/or consultation is provided;

6) types of flight documentation supplied and language(s) used in flight documentation;

7) charts and other information displayed or available for briefing or consultation;

8) supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;

9) the air traffic services unit(s) provided with meteorological information; and

10) additional information (e.g. concerning any limitation of service, etc.).

****** AD 2.12 Runway physical characteristics**

Detailed description of runway physical characteristics, for each runway, including:

1) designations;

2) true bearings to one-hundredth of a degree;

3) dimensions of runways to the nearest metre or foot;

4) strength of pavement (PCN and associated data) and surface of each runway and associated stopways;

5) geographical coordinates in degrees, minutes, seconds and hundredths of seconds for each threshold and runway end, and geoid undulation to the nearest one-half metre or foot for each threshold;

6) elevations of:

— thresholds of a non-precision approach runway to the nearest metre or foot; and

— thresholds and the highest elevation of the touchdown zone of a precision approach runway to the nearest one-half metre or foot;

7) slope of each runway and associated stopways;

8) dimensions of stopway (if any) to the nearest metre or foot;

9) dimensions of clearway (if any) to the nearest metre or foot;

10) dimensions of strips;

11) the existence of an obstacle-free zone; and

12) remarks.

****** AD 2.13 Declared distances**

Detailed description of declared distances to the nearest metre or foot for each direction of each runway, including:

1) runway designator;

2) take-off run available;

3) take-off distance available;

4) accelerate-stop distance available;

5) landing distance available; and

6) remarks.

If a runway direction cannot be used for take-off or landing, or both, because it is operationally forbidden, then this must be declared and the words "not usable" or the abbreviation "NU" entered (MCAR 14 Attachment A, Section 3).

****** AD 2.14 Approach and runway lighting**

Detailed description of approach and runway lighting, including:

1) runway designator;

2) type, length and intensity of approach lighting system;

3) runway threshold lights, colour and wing bars;

4) type of visual approach slope indicator system;

5) length of runway touchdown zone lights;

6) length, spacing, colour and intensity of runway centre line lights;

7) length, spacing, colour and intensity of runway edge lights;

8) colour of runway end lights and wing bars;

9) length and colour of stopway lights; and

10) remarks.

****** AD 2.15 Other lighting, secondary power supply**

Description of other lighting and secondary power supply, including:

1) location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any);

2) location and lighting (if any) of anemometer/landing direction indicator;

3) taxiway edge and taxiway centre line lights;

4) secondary power supply including switch-over time; and

5) remarks.

****** AD 2.16 Helicopter landing area**

Detailed description of helicopter landing area provided at the aerodrome, including:

1) geographical coordinates in degrees, minutes, seconds and hundredths of seconds and geoid undulation to the nearest one-half metre or foot of the geometric centre

of touchdown and lift-off (TLOF) or of each threshold of final approach and take-off (FATO) area (where appropriate);

2) TLOF and/or FATO area elevation:

— for non-precision approaches, to the nearest metre or foot; and

— for precision approaches, to the nearest one-half metre or foot;

3) TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking;

4) true bearings to one-hundredth of a degree of FATO;

5) declared distances available, to the nearest metre or foot;

6) approach and FATO lighting; and

7) remarks.

****** AD 2.17 Air traffic services airspace**

Detailed description of air traffic services (ATS) airspace organized at the aerodrome, including:

1) airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;

2) vertical limits;

3) airspace classification;

4) call sign and language(s) of the ATS unit providing service;

5) transition altitude; and

6) remarks.

****** AD 2.18 Air traffic services communication facilities**

Detailed description of air traffic services communication facilities established at the aerodrome, including:

1) service designation;

2) call sign;

3) channel(s);

4) logon address, as appropriate;

5) hours of operation; and

6) remarks.

****** AD 2.19 Radio navigation and landing aids**

Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome, including:

1) type of aids, magnetic variation to the nearest degree, as appropriate, and type of supported operation for ILS/MLS, basic GNSS, SBAS, and GBAS and for

VOR/ILS/MLS also station declination to the nearest degree used for technical line-up of the aid;

2) identification, if required;

3) frequency(ies), as appropriate;

4) hours of operation, as appropriate;

5) geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;

6) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft); and

7) remarks.

When the same aid is used for both en-route and aerodrome purposes, a description must also be given in section ENR 4. If the ground-based augmentation system (GBAS) serves more than one aerodrome, description of the aid must be provided under each aerodrome. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

****** AD 2.20 Local traffic regulations**

Detailed description of regulations applicable to the traffic at the aerodrome including standard routes for taxiing aircraft, parking regulations, school and training flights and similar but excluding flight procedures.

****** AD 2.21 Noise abatement procedures**

Detailed description of noise abatement procedures established at the aerodrome.

****** AD 2.22 Flight procedures**

Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization at the aerodrome. When established, detailed description of the low visibility procedures at the aerodrome, including:

1) runway(s) and associated equipment authorized for use under low visibility procedures;

2) defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made; and

3) description of ground marking/lighting for use under low visibility procedures.

****** AD 2.23 Additional information**

Additional information at the aerodrome, such as an indication of bird concentrations at the aerodrome, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

****** AD 2.24 Charts related to an aerodrome**

The requirement is for charts related to an aerodrome to be included in the following order:

1) Aerodrome/Heliport Chart — ICAO;

2) Aircraft Parking/Docking Chart — ICAO;

3) Aerodrome Ground Movement Chart — ICAO;

4) Aerodrome Obstacle Chart — ICAO Type A (for each runway);

5) Aerodrome Terrain and Obstacle Chart — ICAO (Electronic);

6) Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways);

7) Area Chart — ICAO (departure and transit routes);

8) Standard Departure Chart — Instrument — ICAO;

9) Area Chart — ICAO (arrival and transit routes);

10) Standard Arrival Chart — Instrument — ICAO;

11) ATC Surveillance Minimum Altitude Chart — ICAO;

12) Instrument Approach Chart — ICAO (for each runway and procedure type);

13) Visual Approach Chart — ICAO; and

14) bird concentrations in the vicinity of the aerodrome.

some of the charts are not produced, a statement to this effect must be given in section GEN 3.2, Aeronautical charts.

Note. — A page pocket may be used in the AIP to include the Aerodrome Terrain and Obstacle Chart — ICAO (Electronic) on appropriate electronic media.

AD 3. HELIPORTS

When a helicopter landing area is provided at the aerodrome, associated data must be listed only under **** AD 2.16.

Note.— **** is to be replaced by the relevant ICAO location indicator.

**** AD 3.1 Heliport location indicator and name

The requirement is for the ICAO location indicator assigned to the heliport and the name of heliport. An ICAO location indicator must be an integral part of the referencing system applicable to all subsections in section AD 3.

**** AD 3.2 Heliport geographical and administrative data

The requirement is for heliport geographical and administrative data, including:

1) heliport reference point (geographical coordinates in degrees, minutes and seconds) and its site;

2) direction and distance of heliport reference point from centre of the city or town which the heliport serves;

3) heliport elevation to the nearest metre or foot, and reference temperature;

4) geoid undulation at the heliport elevation position to the nearest metre or foot;

5) magnetic variation to the nearest degree, date of information and annual change;

6) name of heliport administration, address, telephone, telefax and telex numbers and AFS address;

7) types of traffic permitted to use the heliport (IFR/VFR); and

8) remarks.

****** AD 3.3 Operational hours**

Detailed description of the hours of operation of services at the heliport, including:

1) heliport administration;

2) customs and immigration;

3) health and sanitation;

4) AIS briefing office;

5) ATS reporting office (ARO);

6) MET briefing office;

7) air traffic service;

8) fuelling;

9) handling;

10 security;

11 de-icing; and

12 remarks.

****** AD 3.4 Handling services and facilities**

Detailed description of the handling services and facilities available at the heliport, including:

1) cargo-handling facilities;

2) fuel and oil types;

3) fuelling facilities and capacity;

4) de-icing facilities;

5) hangar space for visiting helicopter;

6) repair facilities for visiting helicopter; and

7) remarks.

****** AD 3.5 Passenger facilities**

Brief description of passenger facilities available at the heliport, including:

1) *hotel(s) at or in the vicinity of the heliport;*

2) *restaurant(s) at or in the vicinity of the heliport;*

3) *transportation possibilities;*

4) medical facilities;

5) *bank and post office at or in the vicinity of the heliport;*

6) *tourist office;* and

7) remarks.

****** AD 3.6 Rescue and firefighting services**

Detailed description of the rescue and firefighting services and equipment available at the heliport, including:

1) heliport category for firefighting;

2) rescue equipment;

3) *capability for removal of disabled helicopter;* and

4) remarks.

****** AD 3.7 Seasonal availability — clearing**

Detailed description of the equipment and operational priorities established for the clearance of heliport movement areas, including:

1) type(s) of clearing equipment;

2) clearance priorities; and

3) remarks.

****** AD 3.8 Aprons, taxiways and check locations/positions data**

Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

1) surface and strength of aprons, helicopter stands;

2) width, surface type and designation of helicopter ground taxiways;

3) width and designation of helicopter air taxiway and air transit route;

4) location and elevation to the nearest metre or foot of altimeter checkpoints;

5) location of VOR checkpoints;

6) position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and

7) remarks.

If check locations/positions are presented on a heliport chart, a note to that effect must be provided under this subsection.

****** AD 3.9 Markings and markers**

Brief description of final approach and take-off area and taxi-way markings and markers, including:

1) final approach and take-off markings;

2) taxiway markings, air taxiway markers and air transit route markers; and

3) remarks.

****** AD 3.10 Heliport obstacles**

Detailed description of obstacles, including:

1) obstacles in Area 2:

a) obstacle identification or designation;

b) type of obstacle;

c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

d) obstacle elevation and height to the nearest metre or foot;

e) obstacle marking, and type and colour of obstacle lighting (if any);

f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and

g) NIL indication, if appropriate.

Note 1.— Annex 15 Chapter 10, 10.2.2, provides a description of Area 2 while Appendix 8, Figure A8-2, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 2.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 2 are given MCAR 11 Appendix 5, Tables 1 and 2, and in Annex 14, Volume II, Appendix 1, Tables 1 and 2, respectively.

2) obstacles in Area 3:

a) obstacle identification or designation;

b) type of obstacle;

c) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

d) obstacle elevation and height to the nearest metre or foot;

e) obstacle marking, and type and colour of obstacle lighting (if any);

f) if appropriate, an indication that the list of obstacles is available in electronic form, and a reference to GEN 3.1.6; and

g) NIL indication, if appropriate.

Note 1.— Annex 15 Chapter 10 provides a description of Area 3 while Appendix 8, Figure A8-3, contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 3.

Note 2.— Specifications governing the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 3 are given in Annex 14, Volume II, Appendix 1, Tables 1 and 2, respectively.

****** AD 3.11 Meteorological information provided**

Detailed description of meteorological information provided at the heliport and an indication of which meteorological office is responsible for the service enumerated, including:

1) name of the associated meteorological office;

2) hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;

3) office responsible for preparation of TAFs, and periods of validity of the forecasts;

4) availability of the trend forecasts for the heliport, and interval of issuance;

5) information on how briefing and/or consultation is provided;

6) type of flight documentation supplied and language(s) used in flight documentation;

7) charts and other information displayed or available for briefing or consultation;

8) supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;

9) the air traffic services unit(s) provided with meteorological information; and

10) additional information (e.g. concerning any limitation of service, etc.).

****** AD 3.12 Heliport data**

Detailed description of heliport dimensions and related information, including:

1) heliport type — surface-level, elevated or helideck;

2) touchdown and lift-off (TLOF) area dimensions to the nearest metre or foot;

3) true bearings to one-hundredth of a degree of final approach and take-off (FATO) area;

4) dimensions to the nearest metre or foot of FATO, and surface type;

5) surface and bearing strength in tonnes (1 000 kg) of TLOF;

6) geographical coordinates in degrees, minutes, seconds and hundredths of seconds and geoid undulation to the nearest one-half metre or foot of the geometric centre of TLOF or of each threshold of FATO (where appropriate);

7) TLOF and/or FATO slope and elevation:

— for non-precision approaches to the nearest metre or foot; and

— for precision approaches to the nearest one-half metre or foot;

8) dimensions of safety area;

9) dimensions, to the nearest metre or foot, of helicopter clearway;

10) the existence of an obstacle-free sector; and

11) remarks.

****** AD 3.13 Declared distances**

Detailed description of declared distances to the nearest metre or foot, where relevant for a heliport, including:

1) take-off distance available;

2) rejected take-off distance available;

3) landing distance available; and

4) remarks.

****** AD 3.14 Approach and FATO lighting**

Detailed description of approach and FATO lighting, including:

1) type, length and intensity of approach lighting system;

2) type of visual approach slope indicator system;

3) characteristics and location of FATO area lights;

4) characteristics and location of aiming point lights;

5) characteristics and location of TLOF lighting system; and

6) remarks.

****** AD 3.15 Other lighting, secondary power supply**

Description of other lighting and secondary power supply, including:

1) location, characteristics and hours of operation of heliport beacon;

2) location and lighting of wind direction indicator (WDI);

3) taxiway edge and taxiway centre line lights;

4) secondary power supply including switch-over time; and

5) remarks.

****** AD 3.16 Air traffic services airspace**

Detailed description of air traffic services (ATS) airspace organized at the heliport, including:

1) airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;

2) vertical limits;

3) airspace classification;

4) call sign and language(s) of ATS unit providing service;

5) transition altitude; and

6) remarks.

****** AD 3.17 Air traffic services communication facilities**

Detailed description of air traffic services communication facilities established at the heliport, including:

1) service designation;

2) call sign;

3) frequency(ies);

4) hours of operation; and

5) remarks.

****** AD 3.18 Radio navigation and landing aids**

Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the heliport, including:

1) type of aids, magnetic variation (for VOR, station declination used for technical line-up of the aid) to the nearest degree, and type of operation for ILS, MLS, basic GNSS, SBAS, and GBAS;

2) identification, if required;

3) frequency(ies), as appropriate;

4) hours of operation, as appropriate;

5) geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;

6) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft); and

7) remarks.

When the same aid is used for both en-route and heliport purposes, a description must also be given in section ENR 4. If the ground-based augmentation system (GBAS) serves more than one heliport, description of the aid must be provided under each heliport. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority must be indicated in the remarks column. Facility coverage must be indicated in the remarks column.

****** AD 3.19 Local traffic regulations**

Detailed description of regulations applicable to traffic at the heliport, including standard routes for taxiing helicopters, parking regulations, school and training flights and similar but excluding flight procedures.

****** AD 3.20 Noise abatement procedures**

Detailed description of noise abatement procedures established at the heliport.

****** AD 3.21 Flight procedures**

Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization established at the heliport. When established, detailed description of the low visibility procedures at the heliport, including:

1) touchdown and lift-off (TLOF) area(s) and associated equipment authorized for use under low visibility procedures;

2) defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made; and

3) description of ground marking/lighting for use under low visibility procedures.

****** AD 3.22 Additional information**

Additional information about the heliport, such as an indication of bird concentrations at the heliport together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

****** AD 3.23 Charts related to a heliport**

The requirement is for charts related to a heliport to be included in the following order:

1) Aerodrome/Heliport Chart — ICAO;

2) Area Chart — ICAO (departure and transit routes);

3) Standard Departure Chart — Instrument — ICAO;

4) Area Chart — ICAO (arrival and transit routes);

5) Standard Arrival Chart — Instrument — ICAO;

6) ATC Surveillance Minimum Altitude Chart — ICAO;

7) Instrument Approach Chart — ICAO (for each procedure type);

8) Visual Approach Chart — ICAO; and

9) bird concentrations in the vicinity of heliport.

If some of the charts are not produced, a statement to this effect must be given in section GEN 3.2, Aeronautical charts.

NOTAM FORMAT

Priority Indicator	→
Address	
	⩽≡
Date & Time of Filing	→
Originator's Indicators	⩽≡ (

Massage Series, Number & Identifier

NOTAM containing new information	……. (series & number/year)	NOTAMN
NOTAM replacing previous NOTAM	……. (series & number/year)	NOTAMR…… (series & number/year NOTAM to be replaced)
NOTAM Canceling a previous NOTAM	……. (series & number/year)	NOTAMC……... (series & number/year NOTAM to be replaced) ⩽≡

Qualifiers

	FIR	NOTAM Code	Traffic	Purpose	Scope	Lower Limit	Upper Limit	Coordinates, Radius	
Q)	/	Q) /	/	/	/	/	/		⩽≡

Identification of ICAO location indicator in which the facility, airspace or condition reported on is located	A) →

Period of validity

From *(date-time group)*	B)											→	
To *(PERM or date-time group)*	C)											EST* PERM*	⩽≡
Time Schedule *(if applicable)*	D)											→	
													⩽≡

Text of NOTAM; Plain-language Entry (using ICAO Abbreviations)

E)

⩽≡

Lower Limit	→
Upper Limit	)⩽≡

Signature

INSTRUCTIONS FOR THE COMPLETION OF THE NOTAM FORMAT

1. General

The qualifier line (Item Q) and all identifiers (Items A) to G) inclusive) each followed by a closing parenthesis, as shown in the format, shall be transmitted unless there is no entry to be made against a particular identifier.

2. NOTAM numbering

Each NOTAM shall be allocated a series identified by a letter and a four-digit number followed by a stroke and a two-digit number for the year (e.g. A0023/03).

3. Qualifiers (Item Q)

Item Q) is divided in eight fields, each separated by a stroke. If no entry is to be made in a field, it is not necessary to transmit blanks between the strokes. Examples of how fields are to be filled are shown in the *Aeronautical Information Services Manual* (Doc 8126). The definition of the field is as follows:

1) FIR

ICAO location indicator of Male' FIR,

2) NOTAM CODE

All NOTAM Code groups contain a total of five letters and the first letter is always the letter Q. The second and third letters identify the subject, and the fourth and fifth letters denote the status of the subject reported upon. For combinations of second and third and fourth and fifth letters, insert the ICAO NOTAM codes listed in the PANS-ABC (Doc 8400) or in the NOTAM Selection Criteria contained in the *Aeronautical Information Services Manual* (Doc 8126) or insert one of the following combinations, as appropriate:

a) If the subject is not listed in the NOTAM Code (Doc 8400) or in the NOTAM Selection Criteria (Doc 8126), insert "XX" as the second and third letters (e.g. QXXAK);

b) If the condition of the subject is not listed in the NOTAM Code (Doc 8400) or in the NOTAM Selection Criteria (Doc 8126), insert "XX" as the fourth and fifth letters (e.g. QFAXX);

c) When a NOTAM containing operationally significant information is issued in accordance with Appendix 3 and details given in this MCAR and when it is used to announce existence of AIRAC AIP Amendments or Supplements, insert "TT" as the fourth and fifth letters of the NOTAM Code;

d) When a NOTAM is issued containing a checklist of valid NOTAM, insert "KKKK" as the second, third, fourth and fifth letters; and

e) The following fourth and fifth letters of the NOTAM Code shall be used in NOTAM cancellations:

AK : RESUMED NORMAL OPERATION
AL : OPERATIVE (OR RE-OPERATIVE) SUBJECT TO PREVIOUSLY PUBLISHED LIMITATIONS/CONDITIONS
AO : OPERATIONAL
CC : COMPLETED
XX : PLAIN LANGUAGE

3) TRAFFIC
I = IFR
V = VFR
K = NOTAM is a checklist

Note.— Depending on the NOTAM subject and content, the qualifier field TRAFFIC may contain combined qualifiers. For possible combinations refer to the NOTAM Selection Criteria in the Aeronautical Information Services Manual (Doc 8126).

4) PURPOSE
N=NOTAM selected for the immediate attention of aircraft operators
B= NOTAM selected for PIB entry
O=NOTAM concerning flight operations
M=Miscellaneous NOTAM; not subject for a briefing, but it is available on request
K= NOTAM is a checklist

Note.— Depending on the NOTAM subject and content, the qualifier field PURPOSE may contain combined qualifiers. For possible combinations refer to the NOTAM Selection Criteria in the Aeronautical Information Services Manual *(Doc 8126).*

5) SCOPE
A = Aerodrome
E = En-route
W = Nav Warning
K = NOTAM is a checklist

Note.— Depending on the NOTAM subject and content, the qualifier field SCOPE may contain combined qualifiers. For possible combinations refer to the NOTAM Selection Criteriain the Aeronautical Information Services Manual (Doc 8126). If the subject is qualified AE, the aerodrome location indicator must be reported in Item A).

6) and 7) LOWER/UPPER
LOWER and UPPER limits shall always be filled and shall only be expressed in flight levels (FL). In the case of navigation warnings and airspace restrictions, values entered shall be consistent with those provided under Items F) and G). If the subject does not contain specific height information, insert “000” for LOWER and “999” for UPPER as default values.

8) COORDINATES, RADIUS
The latitude and longitude accurate to one minute, as well as a three-digit distance figure giving the radius of influence in NM (e.g. 4700N01140E043). Coordinates present approximate centre of circle whose radius encompasses the whole area of

influence, and if the NOTAM affects the entire FIR/UIR or more than one FIR/UIR, enter the default value "999" for radius.

4. Item A)

Insert the location indicator as contained in ICAO Doc 7910 of the aerodrome or FIR in which the facility, airspace, or condition being reported on is located. More than one FIR/UIR may be indicated when appropriate. If there is no available ICAO location indicator, use the ICAO nationality letter as given in ICAO Doc 7910, Part 2, plus "XX" and followed up in Item E) by the name, in plain language. If information concerns GNSS, insert the appropriate ICAO location indicator allocated for a GNSS element or the common location indicator allocated for all elements of GNSS (except GBAS).

5. Item B)

For date-time group use a ten-figure group, giving year, month, day, hours and minutes in UTC. This entry is the date-time at which the NOTAMN, NOTAMR and NOTAM C comes into force.

6. Item C)

With the exception of NOTAMC, a date-time group (a ten-figure group giving year, month, day, hours and minutes in UTC) indicating duration of information shall be used unless the information is of a permanent nature in which case the abbreviation "PERM" is inserted instead. If the information on timing is uncertain, the approximate duration shall be indicated using a date-time group followed by the abbreviation "EST". Any NOTAM which includes an "EST" shall be cancelled or replaced before the date-time specified in Item C).

7. Item D)

If the hazard, status of operation or condition of facilities being reported on will be active in accordance with a specific time and date schedule between the dates-times indicated in Items B) and C), insert such information under Item D). If Item D) exceeds 200 characters, consideration shall be given to providing such information in a separate, consecutive NOTAM.

8. Item E)

Use decoded NOTAM Code, complemented where necessary by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language. When NOTAM is selected for international distribution, English text shall be included for those parts expressed in plain language. This entry shall be clear and concise in order to provide a suitable PIB entry. In the case of NOTAMC, a subject reference and status message shall be included to enable accurate plausibility checks.

9. Items F) and G)

These items are normally applicable to navigation warnings or airspace restrictions and are usually part of the PIB entry. Insert both lower and upper height limits of activities or restrictions, clearly indicating reference datum and units of measurement.

APPENDIX 3 - INFORMATION TO BE NOTIFIED BY AIRAC

PART 1

1. The establishment, withdrawal of, and premeditated significant changes (including operational trials) to:

1.1 Limits (horizontal and vertical), regulations and procedures applicable to:

a) flight information regions;

b) control areas;

c) control zones;

d) advisory areas;

e) ATS routes;

f) permanent danger, prohibited and restricted areas (including type and periods of activity when known) and ADIZ;

g) permanent areas or routes or portions thereof where the possibility of interception exists.

1.2 Positions, frequencies, call signs, known irregularities and maintenance periods of radio navigation aids and communication facilities.

1.3 Holding and approach procedures, arrival and departure procedures, noise abatement procedures and any other pertinent ATS procedures.

1.4 Meteorological facilities (including broadcasts) and procedures.

1.5 Runways and stopways.

PART 2

2. The establishment and withdrawal of, and premeditated significant changes to:

2.1 Position, height and lighting of navigational obstacles.

2.2 Taxiways and aprons.

2.3 Hours of service: aerodromes, facilities and services.

2.4 Customs, immigration and health services.

2.5 Temporary danger, prohibited and restricted areas and navigational hazards, military exercises and mass movements of aircraft.

2.6 Temporary areas or routes or portions thereof where the possibility of interception exists.

AERONAUTICAL DATA QUALITY REQUIREMENTS

Table A7-1. Latitude and longitude

Latitude and longitude	Publication Resolution	Integrity Classification
Flight information region boundary points	1 min	1×10^{-3} routine
P, R, D area boundary points (outside CTA/CTZ boundaries)	1 min	1 × 10–3 routine
P, R, D area boundary points (inside CTA/CTZ boundaries)	1 sec	1 × 10–5 essential
CTA/CTZ boundary points	1 sec	1 × 10–5 essential
En-route NAVAIDS, intersections and waypoints and holding and STAR/SID points	1 sec	1 × 10–5 essential
Obstacles in Area 1 (the entire State territory)	1 sec	1 × 10–3 routine
Aerodrome/heliport reference point	1 sec	1 × 10–3 routine
NAVAIDS located at the aerodrome/heliport	1/10 sec	1 × 10–5 essential
Obstacles in Area 3	1/10 sec	1 × 10–5 essential
Obstacles in Area 2	1/10 sec	1 × 10–5 essential
Final approach fixes/points and other essential fixes/points comprising the instrument approach procedure	1/10 sec	1 × 10–5 essential
Runway threshold	1/100 sec	1 × 10–8 critical
Runway end (flight path alignment point)	1/100 sec	1 × 10–8 critical
Runway holding position	1/100 sec	1 × 10–8 critical
Taxiway centre line/parking guidance line points	1/100 sec	1 × 10–5 essential
Taxiway intersection marking line	1/100 sec	1 × 10–5 essential
Exit guidance line	1/100 sec	1 × 10–5 essential
Aircraft stand points/INS checkpoints	1/100 sec	1 × 10–3 routine
Geometric centre of TLOF or FATO thresholds, heliports	1/100 sec	1 × 10–8 critical
Apron boundaries (polygon)	1/10 sec	1 × 10–3 routine
De-icing/anti-icing facility (polygon)	1/10 sec	1 × 10–3 routine

Table A7-2. Elevation/altitude/height

.Elevation/altitude/height	Publication resolution	Integrity Classification
Aerodrome/heliport elevation	1 m or 1 ft	1 × 10–5 essential
WGS-84 geoid undulation at aerodrome/heliport elevation position	1 m or 1 ft	1 × 10–5 essential
Runway or FATO threshold, non-precision approaches.	1 m or 1 ft	1 × 10–5 essential
WGS-84 geoid undulation at runway or FATO threshold, TLOF geometric centre, non-precision approaches	1 m or 1 ft	1 × 10–5 essential
Runway or FATO threshold, precision approaches	0.1 m or 0.1 ft	1 × 10–8 critical
WGS-84 geoid undulation at runway or FATO threshold, TLOF geometric centre, precision approaches	0.1 m or 0.1 ft	1 × 10–8 critical
Threshold crossing height, precision approaches	0.1 m or 0.1 ft	1 × 10–8 critical
Obstacles in Area 2	1 m or 1 ft	1 × 10–5 essential
Obstacles in Area 3	0.1 m or 0.1 ft	1 × 10–5 essential
Obstacles in Area 1 (the entire State territory)	1 m or 1 ft	1 × 10–3 routine
Distance measuring equipment/precision (DME/P)	3 m (10 ft)	1 × 10–5 essential
Distance measuring equipment (DME)	30 m (100 ft)	1 × 10–5 essential
Minimum altitudes	50 m or 100 ft	1 × 10–3 routine

Table A7-3. Declination and magnetic variation

Declination/variation	Publication Resolution	Integrity Classification
VHF NAVAID station declination used for technical line-up	1 degree	1 × 10–5 essential
NDB NAVAID magnetic variation	1 degree	1 × 10–3 routine
Aerodrome/heliport magnetic variation	1 degree	1 × 10–5 essential
ILS localizer antenna magnetic variation	1 degree	1 × 10–5 essential
MLS azimuth antenna magnetic variation	1 degree	1 × 10–5 essential

Table A7-4. Bearing

Bearing	Publication Resolution	Integrity Classification
Airway segments	1 degree	1 × 10–3 routine
En-route and terminal fix formations	1/10 degree	1 × 10–3 routine
Terminal arrival/departure route segments	1 degree	1 × 10–3 routine
Instrument approach procedure fix formations	1/100 degree	1 × 10–5 essential
ILS localizer alignment (True)	1/100 degree	1 × 10–5 essential
MLS zero azimuth alignment (True)	1/100 degree	1 × 10–5 essential
Runway and FATO bearing (True)	1/100 degree	1 × 10–3 routine

Table A7-5. Length/distance/dimension

Length/distance/dimension	Publication resolution	Integrity Classification
Airway segment length	1/10 km or 1/10 NM	1 × 10–3 routine
En-route fix formation distance	1/10 km or 1/10 NM	1 × 10–3 routine
Terminal arrival/departure route segment length	1/100 km or 1/100 NM	1 × 10–5 essential
Terminal and instrument approach procedure fix formation distance	1/100 km or 1/100 NM	1 × 10–5 essential
Runway and FATO length, TLOF dimensions	1 m or 1 ft	1 × 10–8 critical
Runway width	1 m or 1 ft	1 × 10–5 essential
Displaced threshold distance	1 m or 1 ft	1 × 10–3 routine
Clearway length and width	1 m or 1 ft	1 × 10–5 essential
Stopway length and width	1 m or 1 ft	1 × 10–8 critical
Landing distance available	1 m or 1 ft	1 × 10–8 critical
Take-off run available	1 m or 1 ft	1 × 10–8 critical
Take-off distance available	1 m or 1 ft	1 × 10–8 critical
Accelerate-stop distance available	1 m or 1 ft	1 × 10–8 critical
Runway shoulder width	1 m or 1 ft	1 × 10–5 essential
Taxiway width	1 m or 1 ft	1 × 10–5 essential

Taxiway shoulder width	1 m or 1 ft	1 × 10–5 essential
ILS localizer antenna-runway end, distance	1 m or 1 ft	1 × 10–3 routine
ILS glide slope antenna-threshold, distance along centre line	1 m or 1 ft	1 × 10–3 routine
ILS marker-threshold distance	1 m or 1 ft	1 × 10–5 essential
ILS DME antenna-threshold, distance along centre line	1 m or 1 ft	1 × 10–5 essential
MLS azimuth antenna-runway end, distance.	1 m or 1 ft	1 × 10–3 routine
MLS elevation antenna-threshold, distance along centre line	1 m or 1 ft	1 × 10–3 routine
MLS DME/P antenna-threshold, distance along centre line	1 m or 1 ft	1 × 10–5 essential