



International  
Civil Aviation  
Organization

Organisation  
de l'aviation civile  
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Organización  
de Aviación Civil  
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Международная  
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гражданской  
авиации

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Ref.: AN 4/16.9-18/24

29 March 2018

**Subject:** Adoption of Amendment 8 to Annex 14,  
Volume II

**Action required:** a) Notify any disapproval before  
16 July 2018; b) Notify any differences and compliance  
before 8 October 2018; c) Consider the use of the  
Electronic Filing of Differences (EFOD) System for  
notification of differences and compliance

Sir/Madam,

1. I have the honour to inform you that Amendment 8 to the *International Standards and Recommended Practices, Aerodromes — Heliports* (Annex 14, Volume II to the Convention on International Civil Aviation) was adopted by the Council at the sixth meeting of its 213th Session on 9 March 2018. Copies of the Amendment and the Resolution of Adoption are available as attachments to the electronic version of this State letter on the ICAO-NET (<http://portal.icao.int>) where you can access all other relevant documentation.

2. When adopting the amendment, the Council prescribed 16 July 2018 as the date on which it will become effective, except for any part concerning which a majority of Contracting States have registered their disapproval before that date. In addition, the Council resolved that Amendment 8, to the extent it becomes effective, will become applicable on 8 November 2018.

3. Amendment 8 arises from recommendations of the twelfth meeting of the Aeronautical Information Service (AIS) Aeronautical Information Management (AIM) Study Group (AIS-AIMSG/12).

4. This is a consequential amendment to the restructuring of Annex 15 and the proposed new PANS-AIM. References have been updated accordingly; all aeronautical data quality requirements originally contained in Annex 14, Volume II are moved to Appendix 1 of the PANS-AIM (Aeronautical Data Catalogue). Performance-based requirements have been introduced to maintain data integrity to replace the original provisions on the cyclic redundancy check (CRC).

5. The subjects are given in the amendment to the Foreword of Annex 14, Volume II, a copy of which is in Attachment A.

6. In conformity with the Resolution of Adoption, may I request:

- a) that before 16 July 2018 you inform me if there is any part of the adopted Standards and Recommended Practices (SARPs) amendments in Amendment 8 concerning which your Government wishes to register disapproval, using the form in Attachment B for this purpose. Please note that only statements of disapproval need be registered and if you do not reply it will be assumed that you do not disapprove of the amendment;
- b) that before 8 October 2018 you inform me of the following, using the Electronic Filing of Differences (EFOD) System or the form in Attachment C for this purpose:
  - 1) any differences that will exist on 8 November 2018 between the national regulations or practices of your Government and the provisions of the whole of Annex 14, Volume II, as amended by all amendments up to and including Amendment 8, and thereafter of any further differences that may arise; and
  - 2) the date or dates by which your Government will have complied with the provisions of the whole of Annex 14, Volume II, as amended by all amendments up to and including Amendment 8.

7. With reference to the request in paragraph 6 a) above, it should be noted that a registration of disapproval of Amendment 8 or any part of it in accordance with Article 90 of the Convention does not constitute a notification of differences under Article 38 of the Convention. To comply with the latter provision, a separate statement is necessary if any differences do exist, as requested in paragraph 6 b) 1). It is recalled in this respect that international Standards in Annexes have a conditional binding force, to the extent that the State or States concerned have not notified any difference thereto under Article 38 of the Convention.

8. With reference to the request in paragraph 6 b) above, it also should be noted that the ICAO Assembly, at its 38th Session (24 September to 4 October 2013), resolved that Member States should be encouraged to use the EFOD System when notifying differences (Resolution A38-11 refers). The EFOD System is currently available on the Universal Safety Oversight Audit Programme (USOAP) restricted website (<http://www.icao.int/usoap>) which is accessible by all Member States. You are invited to consider using this for notification of compliance and differences.

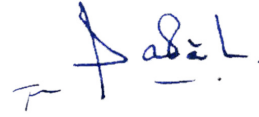
9. Guidance on the determination and reporting of differences is given in the Note on the Notification of Differences in Attachment D. Please note that a detailed repetition of previously notified differences, if they continue to apply, may be avoided by stating the current validity of such differences.

10. I would appreciate it if you would also send a copy of your notifications, referred to in paragraph 6 b) above, to the ICAO Regional Office accredited to your Government.

11. At the fifth meeting of its 204th Session, the Council requested that States, when being advised of the adoption of an Annex amendment, be provided with information on implementation and available guidance material, as well as an impact assessment. This is presented for your information in Attachments E and F, respectively.

12. As soon as practicable after the amendment becomes effective, on 16 July 2018, replacement pages incorporating Amendment 8 will be forwarded to you.

Accept, Sir/Madam, the assurances of my highest consideration.

A handwritten signature in blue ink, appearing to read 'Fang Liu', with a horizontal line underneath.

Fang Liu  
Secretary General

**Enclosures:**

- A — Amendment to the Foreword of Annex 14, Volume II
- B — Form on notification of disapproval of all or part of Amendment 8 to Annex 14, Volume II
- C — Form on notification of compliance with or differences from Annex 14, Volume II, Amendment 8
- D — Note on the Notification of Differences
- E — Implementation task list and outline of guidance material in relation to Amendment 8 to Annex 14, Volume II
- F — Impact assessment in relation to Amendment 8 to Annex 14, Volume II



ATTACHMENT A to State letter AN 4/16.9-18/24

AMENDMENT TO THE FOREWORD OF ANNEX 14, VOLUME II

Add the following at the end of Table A:

<i>Amendment</i>	<i>Source(s)</i>	<i>Subject</i>	<i>Adopted/Approved Effective Applicable</i>
8	Twelfth meeting of the Aeronautical Information Service (AIS) Aeronautical Information Management (AIM) Study Group (AIS-AIMSG/12)	Consequential amendments related to change of references, data quality requirements and performance-based data error detection requirements as a result of the restructuring of Annex 15 and the introduction of PANS-AIM (Doc 10066).	9 March 2018 16 July 2018 8 November 2018

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ATTACHMENT B to State letter AN 4/16.9-18/24

NOTIFICATION OF DISAPPROVAL OF ALL OR PART OF  
AMENDMENT 8 TO ANNEX 14, VOLUME II

To: The Secretary General  
International Civil Aviation Organization  
999 Boulevard Robert-Bourassa  
Montréal, Quebec  
Canada H3C 5H7

(State) \_\_\_\_\_ hereby wishes to disapprove the following parts of  
Amendment 8 to Annex 14, Volume II:

Signature \_\_\_\_\_

Date \_\_\_\_\_

*NOTES*

- 1) If you wish to disapprove all or part of Amendment 8 to Annex 14, Volume II, please dispatch this notification of disapproval to reach ICAO Headquarters by 16 July 2018. If it has not been received by that date it will be assumed that you do not disapprove of the amendment. **If you approve of all parts of Amendment 8 it is not necessary to return this notification of disapproval.**
- 2) This notification should not be considered a notification of compliance with or differences from Annex 14, Volume II. Separate notifications on this are necessary. (See Attachment C.)
- 3) Please use extra sheets as required.

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ATTACHMENT C to State letter AN 4/16.9-18/24

**NOTIFICATION OF COMPLIANCE WITH OR DIFFERENCES FROM  
ANNEX 14, VOLUME II  
(Including all amendments up to and including Amendment 8)**

To: The Secretary General  
International Civil Aviation Organization  
999 Boulevard Robert-Bourassa  
Montréal, Quebec  
Canada H3C 5H7

1. No differences will exist on \_\_\_\_\_ between the national regulations and/or practices of **(State)** \_\_\_\_\_ and the provisions of Annex 14, Volume II, including all amendments up to and including Amendment 8.

2. The following differences will exist on \_\_\_\_\_ between the regulations and/or practices of **(State)** \_\_\_\_\_ and the provisions of Annex 14, Volume II, including Amendment 8 (Please see Note 2) below.)

<b>a) Annex Provision</b> (Please give exact paragraph reference)	<b>b) Details of Difference</b> (Please describe the difference clearly and concisely)	<b>c) Remarks</b> (Please indicate reasons for the difference)
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(Please use extra sheets as required)

3. By the dates indicated below, **(State)** \_\_\_\_\_ will have complied with the provisions of Annex 14, Volume II, including all amendments up to and including Amendment 8 for which differences have been notified in 2 above.

a) <b>Annex Provision</b> (Please give exact paragraph reference)	b) <b>Date</b>	c) <b>Comments</b>
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(Please use extra sheets as required)

Signature \_\_\_\_\_

Date \_\_\_\_\_

*NOTES*

- 1) If paragraph 1 above is applicable to you, please complete paragraph 1 and return this form to ICAO Headquarters. If paragraph 2 is applicable to you, please complete paragraphs 2 and 3 and return the form to ICAO Headquarters.
- 2) A detailed repetition of previously notified differences, if they continue to apply, may be avoided by stating the current validity of such differences.
- 3) Guidance on the notification of differences is provided in the Note on the Notification of Differences and in the *Manual on Notification and Publication of Differences* (Doc 10055).
- 5) Please send a copy of this notification to the ICAO Regional Office accredited to your Government.

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ATTACHMENT D to State letter AN 4/16.9-18/24

**NOTE ON THE NOTIFICATION OF DIFFERENCES**  
(Prepared and issued in accordance with instructions of the Council)

1. *Introduction*

1.1 Article 38 of the *Convention on International Civil Aviation* (“Convention”) requires that a Contracting State notify ICAO any time it does not comply with a Standard in all respects, it does not bring its regulations or practices into full accord with any Standard, or it adopts regulations or practices differing in any particular respect from the Standard.

1.2 The Assembly and the Council, when reviewing the notification of differences by Contracting States in compliance with Article 38 of the Convention, have repeatedly noted that the timeliness and currency of such notifications is not entirely satisfactory. Therefore, this note is issued to reiterate the primary purpose of Article 38 of the Convention and to facilitate the determination and notification of differences.

1.3 The primary purpose of the notification of differences is to promote safety, regularity and efficiency in air navigation by ensuring that governmental and other agencies, including operators and service providers, concerned with international civil aviation are made aware of all national regulations and practices in so far as they differ from those prescribed in the Standards contained in Annexes to the Convention.

1.4 Contracting States are, therefore, requested to give particular attention to the notification of differences with respect to Standards in all Annexes, as described in paragraph 4 b) 1) of the Resolution of Adoption.

1.5 Although differences from Recommended Practices are not notifiable under Article 38 of the Convention, the Assembly has urged Contracting States to extend the above considerations to Recommended Practices contained in Annexes to the Convention, as well.

2. *Notification of differences from Standards and Recommended Practices (SARPs)*

2.1 Guidance to Contracting States in the notification of differences to Standards and Recommended Practices (SARPs) can only be given in very general terms. Contracting States are further reminded that compliance with SARPs generally extends beyond the issuance of national regulations and requires establishment of practical arrangements for implementation, such as the provision of facilities, personnel and equipment and effective enforcement mechanisms. Contracting States should take those elements into account when determining their compliance and differences. The following categories of differences are provided as a guide in determining whether a notifiable difference exists:

- a) *A Contracting State’s requirement is more exacting or exceeds a SARP (Category A)*. This category applies when the national regulation and practices are more demanding than the corresponding SARP, or impose an obligation within the scope of the Annex which is not covered by the SARP. This is of particular importance where a Contracting State requires a higher standard which affects the operation of aircraft of other Contracting States in and above its territory;

- b) *A Contracting State's requirement is different in character or the Contracting State has established other means of compliance (Category B)\**. This category applies, in particular, when the national regulation and practices are different in character from the corresponding SARP, or when the national regulation and practices differ in principle, type or system from the corresponding SARP, without necessarily imposing an additional obligation; and
- c) *A Contracting State's requirement is less protective, partially implemented or not implemented (Category C)*. This category applies when the national regulation and practices are less protective than the corresponding SARP; when no national regulation has been promulgated to address the corresponding SARP, in whole or in part; or when the Contracting State has not brought its practices into full accord with the corresponding SARP.

These categories do not apply to Not Applicable SARP. Please see the paragraph below.

2.2 **Not Applicable SARP.** When a Contracting State deems a SARP concerning aircraft, operations, equipment, personnel, or air navigation facilities or services to be not applicable to the existing aviation activities of the State, notification of a difference is not required. For example, a Contracting State that is not a State of Design or Manufacture and that does not have any national regulations on the subject, would not be required to notify differences from Annex 8 provisions related to the design and construction of an aircraft.

2.3 **Differences from appendices, tables and figures.** The material comprising a SARP includes not only the SARP itself, but also the appendices, tables and figures associated with the SARP. Therefore, differences from appendices, tables and figures are notifiable under Article 38. In order to file a difference against an appendix, table or figure, States should file a difference against the SARP that makes reference to the appendix, table or figure.

2.4 **Differences from definitions.** Contracting States should notify differences from definitions. The definition of a term used in a SARP does not have independent status but is an essential part of each SARP in which the term is used. Therefore, a difference from the definition of the term may result in there being a difference from any SARP in which the term is used. To this end, Contracting States should take into consideration differences from definitions when determining compliance or differences to SARPs in which the terms are used.

2.5 The notification of differences should be not only to the latest amendment but to the whole Annex, including the amendment. In other words, Contracting States that have already notified differences are requested to provide regular updates of the differences previously notified until the difference no longer exists.

2.6 Further guidance on the identification and notification of differences, examples of well-defined differences and examples of model processes and procedures for management of the notification of differences can be found in the *Manual on Notification and Publication of Differences* (Doc 10055).

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\* The expression "different in character or other means of compliance" in b) would be applied to a national regulation and practice which achieve, by other means, the same objective as that of the corresponding SARPs or for other substantive reasons so cannot be classified under a) or c).

3. *Form of notification of differences*

3.1 Differences can be notified:

- a) by sending to ICAO Headquarters a form on notification of compliance or differences; or
- b) through the Electronic Filing of Differences (EFOD) System at [www.icao.int/usoap](http://www.icao.int/usoap).

3.2 When notifying differences, the following information should be provided:

- a) the number of the paragraph or subparagraph which contains the SARP to which the difference relates\*;
- b) the reasons why the State does not comply with the SARP, or considers it necessary to adopt different regulations or practices;
- c) a clear and concise description of the difference; and
- d) intentions for future compliance and any date by which your Government plans to confirm compliance with and remove its difference from the SARP for which the difference has been notified.

3.3 The differences notified will be made available to other Contracting States, normally in the terms used by the Contracting State when making the notification. In the interest of making the information as useful as possible, Contracting States are requested to ensure that:

- a) statements be as clear and concise as possible and be confined to essential points;
- b) the provision of extracts from national regulations not be considered as sufficient to satisfy the obligation to notify differences; and
- c) general comments, unclear acronyms and references be avoided.

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\* This applies only when the notification is made under 3.1 a).



**IMPLEMENTATION TASK LIST AND OUTLINE OF GUIDANCE MATERIAL  
IN RELATION TO AMENDMENT 8 TO ANNEX 14, VOLUME II**

**1. IMPLEMENTATION TASK LIST**

1.1 Essential steps to be followed by a State in order to implement the amendment to Annex 14, Volume II:

- a) identification of the rule-making process necessary to transpose the new ICAO provisions into national regulations;
- b) establishment of a national implementation plan that takes into account the new ICAO provisions;
- c) conducting of a gap analysis between the new ICAO provisions and national framework;
- d) drafting of the necessary modification(s) to the national regulations;
- e) official adoption of the national regulations and means of compliance;
- f) modification of the oversight framework according to the new national regulations;
- g) filing of State differences with ICAO, if necessary;
- h) publication of significant differences in the AIP;
- i) implementation of the new national regulations by heliport operators; and
- j) oversight by the State on the implementation of regulations.

**2. STANDARDIZATION PROCESS**

- 2.1 Effective date: 16 July 2018
- 2.2 Applicability date: 8 November 2018
- 2.3 Embedded applicability date(s): N/A

### 3. SUPPORTING DOCUMENTATION

#### 3.1 ICAO documentation

<b>Title</b>	<b>Type (PANS/TI/Manual/Circ)</b>	<b>Planned publication date</b>
<i>Procedures for Air Navigation Services — Aeronautical Information Management (PANS-AIM) (Doc 10066)</i>	PANS	November 2018
<i>Aeronautical Information Services Manual (Doc 8126)</i>	Updated guidance	November 2018

#### 3.2 External documentation

<b>Title</b>	<b>External Organization</b>	<b>Publication date</b>
N/A		

### 4. IMPLEMENTATION ASSISTANCE TASKS

<b>Type</b>	<b>Global</b>	<b>Regional</b>
Workshops	None	AIM Conferences/workshops

### 5. UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP)

5.1 Changes are envisaged in the protocol questions due to the modification of references to Annex 15 and the proposed new PANS-AIM.

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**IMPACT ASSESSMENT IN RELATION TO AMENDMENT 8 TO ANNEX 14, VOLUME II**

**1. INTRODUCTION**

1.1 Amendment 8 to Annex 14, Volume II addresses a consequential amendment, resulting from the restructuring of Annex 15 and the proposed new PANS-AIM, relating to change of references, data quality requirements and performance-based data error detection requirements.

**2. IMPACT ASSESSMENT**

2.1 *Safety impact:* Positive. The amendment ensures alignment among requirements, as contained in Annex 14, Volume II, Annex 15 and the PANS-AIM (Doc 10066) and avoids misinterpretation. Additionally, the introduction of performance-based requirements for data error detection allows for greater flexibility in terms of implementation techniques, leading to more efficient processes and allowing an enhanced output in terms of quality. This results in a reduced risk of providing erroneous data and increased safety.

2.2 *Financial impact:* Minimal financial impact to both States and Industry.

2.3 *Security impact:* No security impact with the implementation of this proposal.

2.4 *Environmental impact:* Negligible.

2.5 *Efficiency impact:* Positive. The amendment to Annex 14, Volume II relocates the quality requirements for aeronautical data into a single reference (the Aeronautical Data Catalogue), which will facilitate compliance by Contracting States, and allow future changes in aeronautical data specificity to be updated with greater ease. Requirements are cross-referenced and therefore retrieved in a more efficient way.

2.6 *Expected implementation time:* States will require no more than one year to modify their regulatory framework to take into account the new references to Annex 15 and the PANS-AIM.



**AMENDMENT No. 8**

**TO THE**

**INTERNATIONAL STANDARDS  
AND RECOMMENDED PRACTICES**

# **AERODROMES**

**ANNEX 14**

**TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

**VOLUME II — HELIPORTS**

The amendment to Annex 14, Volume II contained in this document was adopted by the Council of ICAO on **9 March 2018**. Such parts of this amendment as have not been disapproved by more than half of the total number of Contracting States on or before **16 July 2018** will become effective on that date and will become applicable on **8 November 2018** as specified in the Resolution of Adoption. (State letter AN 4/16.9-18/24 refers.)

**MARCH 2018**

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**



**AMENDMENT 8 TO THE INTERNATIONAL STANDARDS AND  
RECOMMENDED PRACTICES**

**ANNEX 14 — AERODROMES  
VOLUME II — HELIPORTS**

**RESOLUTION OF ADOPTION**

*The Council*

Acting in accordance with the Convention on International Civil Aviation, and particularly with the provisions of Articles 37, 54 and 90 thereof,

1. *Hereby adopts* on 9 March 2018 Amendment 8 to the International Standards and Recommended Practices contained in the document entitled *International Standards and Recommended Practices, Aerodromes — Heliports* which for convenience is designated Annex 14, Volume II to the Convention;
2. *Prescribes* 16 July 2018 as the date upon which the said amendment shall become effective, except for any part thereof in respect of which a majority of the Contracting States have registered their disapproval with the Council before that date;
3. *Resolves* that the said amendment or such parts thereof as have become effective shall become applicable on 8 November 2018;
4. *Requests the Secretary General:*
  - a) to notify each Contracting State immediately of the above action and immediately after 16 July 2018 of those parts of the amendment which have become effective;
  - b) to request each Contracting State:
    - 1) to notify the Organization (in accordance with the obligation imposed by Article 38 of the Convention) of the differences that will exist on 8 November 2018 between its national regulations or practices and the provisions of the Standards in the Annex as hereby amended, such notification to be made before 8 October 2018, and thereafter to notify the Organization of any further differences that arise;
    - 2) to notify the Organization before 8 October 2018 of the date or dates by which it will have complied with the provisions of the Standards in the Annex as hereby amended; and
  - c) to invite each Contracting State to notify additionally any differences between its own practices and those established by the Recommended Practices following the procedure specified in subparagraph b) above with respect to differences from Standards.

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**NOTES ON THE PRESENTATION OF THE  
AMENDMENT TO ANNEX 14, VOLUME II**

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

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

text to be deleted

New text to be inserted is highlighted with grey shading.

new text to be inserted

~~Text to be deleted is shown with a line through it~~ followed by the replacement text which is highlighted with grey shading.

new text to replace existing text

**TEXT OF AMENDMENT 8**

**TO THE**

**INTERNATIONAL STANDARDS**  
**AND RECOMMENDED PRACTICES**

**AERODROMES**

**ANNEX 14**  
**TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

**VOLUME II**  
**HELIPORTS**

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Editorial Note.— *Renumber* subsequent appendix accordingly.

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**CHAPTER 2. HELIPORT DATA**

**2.1 Aeronautical data**

2.1.1 Determination and reporting of heliport-related aeronautical data shall be in accordance with the accuracy and integrity classification required to meet the needs of the end-user of aeronautical data requirements set forth in Tables A1-1 to A1-5 contained in Appendix 1 while taking into account the established quality system procedures. Accuracy requirements for aeronautical data are based upon a 95 per cent confidence level and in that respect, three types of positional data shall be identified: surveyed points (e.g. FATO threshold), calculated points (mathematical calculations from the known surveyed points of points in space, fixes) and declared points (e.g. flight information region boundary points).

*Note.— Specifications governing the quality system are given in Annex 15, Chapter 3. Specifications concerning the accuracy and integrity classification related to heliport related aeronautical data are contained in PANS-AIM (Doc 10066), Appendix 1.*



~~2.1.2 Contracting States shall ensure that integrity of aeronautical data is maintained throughout the data process from survey/origin to the next intended user. Based on the applicable integrity classification, the validation and verification procedures shall:~~

- ~~a) for routine data: avoid corruption throughout the processing of the data;~~
- ~~b) for essential data: assure corruption does not occur at any stage of the entire process and may include additional processes as needed to address potential risks in the overall system architecture to further assure data integrity at this level; and~~
- ~~e) for critical data: assure corruption does not occur at any stage of the entire process and include additional integrity assurance procedures to fully mitigate the effects of faults identified by thorough analysis of the overall system architecture as potential data integrity risks.~~

*Note.*—~~Guidance material in respect to the processing of aeronautical data and aeronautical information is contained in RTCA Document DO 200B and European Organization for Civil Aviation Equipment (EUROCAE) Document ED 76B—Standards for Processing Aeronautical Data.~~

~~2.1.3<sup>2</sup> 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 2.1.2, a 32 or 24 bit CRC algorithm shall apply respectively. Digital data error detection techniques shall be used during the transmission and/or storage of aeronautical data and digital data sets.~~

*Note .*—~~Detailed specifications concerning digital data error detection techniques are contained in PANS-AIM (Doc 10066).~~

~~2.1.4 **Recommendation.**—To achieve protection of the integrity level of routine aeronautical data as classified in 2.1.2, a 16 bit CRC algorithm should apply.~~

*Note.*—~~Guidance material on the aeronautical data quality requirements (accuracy, resolution, integrity, protection and traceability) is contained in the World Geodetic System—1984 (WGS 84) Manual (Doc 9674). Supporting material in respect of the provisions of Appendix 5 related to accuracy and integrity of aeronautical data is contained in RTCA Document DO 201A and European Organization for Civil Aviation Equipment (EUROCAE) Document ED 77, entitled Industry Requirements for Aeronautical Information.~~

~~2.1.5—Geographical coordinates indicating latitude and longitude shall be determined and reported to the aeronautical information services authority in terms of the World Geodetic System—1984 (WGS-84) geodetic reference datum, identifying those geographical coordinates which have been transformed into WGS 84 coordinates by mathematical means and whose accuracy of original field work does not meet the requirements in Appendix 1, Table A1-1.~~

~~2.1.6—The order of accuracy of the field work shall be such that the resulting operational navigation data for the phases of flight will be within the maximum deviations, with respect to an appropriate reference frame, as indicated in the tables contained in Appendix 1.~~

~~2.1.7—In addition to the elevation (referenced to mean sea level) of the specific surveyed ground positions at heliports, geoid undulation (referenced to the WGS 84 ellipsoid) for those positions as indicated in Appendix 1 shall be determined and reported to the aeronautical information services authority.~~

*Note 1.— An appropriate reference frame is that which enables WGS 84 to be realized on a given aerodrome and with respect to which all coordinate data are related.*

*Note 2.— Specifications governing the publication of WGS 84 coordinates are given in Annex 4, Chapter 2 and Annex 15, Chapter 3.*

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## 2.4 Heliport dimensions and related information

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2.4.5 The geographical coordinates of obstacles in Area 2 (the part within the heliport boundary) and in Area 3 shall be measured and reported to the aeronautical information services authority in degrees, minutes, seconds and tenths of seconds. In addition, the top elevation, type, marking and lighting (if any) of obstacles shall be reported to the aeronautical information services authority.

*Note 1.— See Annex 15, Appendix 81, for graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Areas 2 and 3.*

*Note 2.— PANS-AIM (Doc 10066), Appendix 1 to this Annex provides requirements for obstacle data determination in Areas 2 and 3.*

*Note 3.— Implementation of Annex 15, provisions 10.1.4 and 10.1.6, concerning the availability, as of 12 November 2015, of obstacle data according to Area 2 and Area 3 specifications would be facilitated by appropriate advance planning for the collection and processing of such data.*

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## 2.6 Coordination between aeronautical information services and heliport authorities

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2.6.3 Of a particular importance are changes to aeronautical information that affect charts and/or computer-based navigation systems which qualify to be notified by the ~~a~~Aeronautical ~~I~~Information ~~R~~Regulation and ~~e~~Control (AIRAC) system, as specified in Annex 15, Chapter 6 and Appendix 4. The predetermined, internationally agreed AIRAC effective dates ~~in addition to 14 days postage time~~ shall be observed by the responsible heliport services when submitting the raw information/data to aeronautical information services.

*Note.— Detailed specifications concerning the AIRAC system are contained in PANS-AIM (Doc 10066), Chapter 6.*

2.6.4 The heliport services responsible for the provision of raw aeronautical information/data to the aeronautical information services shall do that while taking into account accuracy and integrity requirements required to meet the needs of the end-user of aeronautical data ~~for aeronautical data as specified in Appendix 1 to this Annex.~~

*Note 1.— Specifications concerning the accuracy and integrity classification of heliport-related aeronautical data are contained in PANS-AIM (Doc 10066), Appendix 1.*

*Note 12.— Specifications for the issue of NOTAM and SNOWTAM are contained in Annex 15, Chapter 56 and PANS-AIM (Doc 10066), Appendices 63 and 24, respectively.*

*Note 23.— The AIRAC information is distributed by the AIS at least 42 days in advance of the AIRAC effective dates with the objective of reaching recipients at least 28 days in advance of the effective date.*

*Note 34.— The schedule of the predetermined internationally agreed AIRAC common effective dates at intervals of 28 days and guidance for the AIRAC use are contained in the Aeronautical Information Services Manual (Doc 8126, Chapter 2, 2.6).*

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#### ~~APPENDIX 1. AERONAUTICAL DATA QUALITY REQUIREMENTS~~

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*Editorial Note.— Delete Appendix 1 in toto and renumber subsequent appendix and paragraphs accordingly.*

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— END —